



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, DC 20380-0001

MCO P11000.5F
LFF-2-dt
12 Aug 1987

MARINE CORPS ORDER P11000.5F W/CH 1-5

From: Commandant of the Marine Corps
To: Distribution List

Subj: Real Property Facilities Manual, Volume IV

Encl: (1) LOCATOR SHEET

1. Purpose. To provide guidance and instructions as relate to facilities projects.
2. Cancellation. MCO P11000.5E.
3. Summary of Revision. This revision contains a substantial number of changes and should be completely reviewed.
4. Recommendation. Recommendations concerning the contents of the Real Property Facilities Manual, Volume IV, are invited. Submit via the appropriate chain of command for evaluation.
5. Reserve Applicability. This Manual is not applicable to the Marine Corps Reserve.
6. Certification. Reviewed and approved this date.

J. J. WENT
Deputy Chief of Staff
for Instations and Logistics

DISTRIBUTION: CC

Copy to: 8145001

PCN 102 112800 00

UNCLASSIFIED

01 01 020541Z FEB 90

UUUU

ADMIN

CMC WASHINGTON DC//LFF-2/FDB//

ALMAR

ACCT-NA-CRARHQ

UNCLAS //N11000//

ALMAR 036/90

SUBJ: MCO P11000.5F CH 1. REAL PROPERTY FACILITIES MANUAL

VOLUME IV FACILITIES PROJECTS MANUAL

A. COMNAVFACENGCOM MSG 091137Z NOV 89 (NOTAL)

1. THIS CHANGE IS APPLICABLE TO MARINE CORPS ACTIVITIES ON PCN 10211280000
(FORMERLY DISTRIBUTION CODE CC).

2. PURPOSE. TO DIRECT A CHANGE TO THE SUBJECT ORDER PER THE REFERENCE.

3. IN PAR. 1006.13B CHANGE THE SECOND SENTENCE TO READ: "THE SIOH COST IS
EITHER 6 PERCENT OF THE PROJECT COST WITHIN CONUS OR 6.5 PERCENT OF THE
PROJECT COST OCONUS AND IS TO BE ADDED TO THE TOTAL COST FOR ALL MINOR
CONSTRUCTION PROJECTS ACCOMPLISHED BY CONTRACT."

4. THIS CHANGE IS EFFECTIVE 1 JAN 90.

L(9), GENDIST

PCN 10211280000

BEN BOND, LFF-2, 60859

WPC

W. G. CARSON, JR., LTGEN, DC/S I&L

6-1028

UNCLASSIFIED

01 03 040241Z FEB 91 RR UUUU

ADMIN

CMC WASHINGTON DC//LFF//

ALMAR

XMT MSG DET AMCONGEN DEDDA SA

MSG DET AMEMB AMMAN JO

MSG DET AMEMB KUWAIT KUWAIT

MSG DET AMEMB ALGIERS ALGERIA

ACCT NA-CRARHQ

UNCLAS //N11000//

SUBJ: MCO P11000.5F CH 2. REAL PROPERTY FACILITIES MANUAL

VOLUME IV FACILITIES PROJECTS MANUAL

MSGID/GENADMIN/CMC LFF//

RMKS/

1. THIS CHANGE IS APPLICABLE TO MARINE CORPS ACTIVITIES ON PCN 10211280000 (FORMERLY DISTRIBUTION CODE CC).
2. PURPOSE. TO DIRECT A CHANGE TO THE SUBJECT ORDER TO ENHANCE PROJECT DOCUMENTATION REQUIREMENTS.
3. ACTION.

A. IN PAR. 2005.4A(6) CHANGE THE FIRST SENTENCE TO READ: "FPD FOR THE CATEGORY CODES AFFECTED BY THE PROJECT (REQUIRED FOR ALL PROJECTS)."

I-L(9), GENDIST

MINIMIZE CONSIDERED

RITA M. ALBRIGHT, LFF-2, 6-0859

R J WINGLASS, LTGEN, DC/SI&L, 61028

PCN 10211280002

UNCLASSIFIED

UNCLASSIFIED

02 03 RR UUUU

B. IN PAR. 2005.4A(6) ADD AFTER THE LAST LINE: "IF THE REQUIREMENT FOR THE FACILITY IS NOT SUPPORTED BY THE FPD, PROJECTS WILL NOT BE REVIEWED BY THE VALIDATOR."

C. AFTER PAR. 2005.4A(6) ADD TWO NEW PARAGRAPHS:
"(7) POLLUTION CONTROL REPORT (PCR) FOR ALL ENVIRONMENTAL PROJECTS. PREPARE AND FORWARD THE PCR TO CMC (CODE LFL) FOR INCLUSION IN THE OMB, A-106 REPORT. NO ENVIRONMENTAL PROJECT WILL BE CONSIDERED FOR APPROVAL UNLESS PROJECT DOCUMENTATION INCLUDES A COPY OF THE PCR.
(8) AN ECONOMIC ANALYSIS IS REQUIRED AS AN ENCLOSURE IF THE COST OF THE PROJECT IS OVER 200,000 DOLLARS AND 50 PERCENT OF THE REPLACEMENT COST OR WHEN THE REPAIR COSTS FOR AN INDIVIDUAL PROJECT EXCEEDS 500,000 DOLLARS. SUBMISSION OF AN ECONOMIC ANALYSIS IS ENCOURAGED FOR ALL PROJECTS BECAUSE THIS ADDS STRENGTH TO THE DOCUMENTATION AND ASSISTS IN THE PRIORITIZATION OF THE PROJECTS. IN ALL ECONOMIC ANALYSES SUBMITTED, THE STATUS QUO OPTION (IE THE CONTINUED USE OF THE FACILITY WITH ONLY ROUTINE MAINTENANCE) SHOULD BE ADDRESSED."

D. IN FIGURE 2-1 CHANGE NO 10 TO READ: "POLLUTION CONTROL REPORT"

F. IN FIGURE 2-1 CHANGE NOTE 2 TO READ: "AS A MINIMUM, AN M2

RITA M. ALBRIGHT, LFF-2, 6-0859

R J WINGLASS, LTGEN, DC/SI&L, 61028

UNCLASSIFIED

040241Z FEB 91

UNCLASSIFIED

03 03

RR

UUUU

PROJECT FILE WILL CONTAIN ITEMS 6, 7, 8, 5, 12, AND 13 PRECEDING."

F. IN FIGURE 2-3 NOTE ADD AFTER LAST LINE: "A PCR IS
REQUIRED FOR ALL ENVIRONMENTAL PROJECTS."

4. THIS CHANGE IS EFFECTIVE 1 JAN 91.

RITA M. ALBRIGHT, LFF-2, 6-0859

R J WINGLASS, LTGEN, DC/SI&L, 61028

UNCLASSIFIED

040241Z FEB 91

UNCLASSIFIED

01 02 JAN 92 RR UUUU

ADMIN

CMC WASHINGTON DC//I-L//

AIG ZERO ZERO EIGHT

ACCT NA-CRARHQ

UNCLAS //N11000//

SUBJ/MCO P11000.5F CH 3. REAL PROPERTY FACILITIES MANUAL VOLUME IV

/FACILITIES PROJECT MANUAL//

MSGID/GENADMIN/CMC LFF//

RMKS/

1. THIS CHANGE IS APPLICABLE TO MARINE CORPS ACTIVITIES ON PCN

10211280000 (FORMERLY DISTRIBUTION CODE CC).

2. THIS CHANGE IS EFFECTIVE 6 DEC 1991.

3. PURPOSE. TO DIRECT A CHANGE TO THE SUBJECT ORDER TO UPDATE THE
MINOR CONSTRUCTION LIMIT.

4. ACTION

A. IN PAR. 2001.1A, CHANGE THE FIRST SENTENCE TO READ: "MINOR
CONSTRUCTION PROJECTS HAVING A FUNDED COST BETWEEN 100,001 DOLLARS
AND 300,000 DOLLARS."

B. IN PAR. 2001.1D, CHANGE THE FIRST SENTENCE TO READ:
"EQUIPMENT INSTALLATION PROJECTS HAVING A FUNDED COST BETWEEN
100,001 DOLLARS AND 300,000 DOLLARS."

I-L(9), GENDIST

R. D. WELBORN, GM-13, LFF-2, 6-08

PCN 10211280003

R J WINGLASS, LTGEN, DC/SI&L, 61028

UNCLASSIFIED

02 02 RR UUUU

C. IN PAR. 2001.2B, CHANGE THE FIRST SENTENCE TO READ:
"CONSTRUCTION PROJECTS HAVING A TOTAL FUNDED COST OF 300.001 DOLLARS
AND OVER."

D. IN PAR. 3107, CHANGE THE SECOND SENTENCE TO: "THE MAXIMUM
AMOUNT FOR A MINOR O&MMC PROJECT IS CURRENTLY 300,000 DOLLARS."

E. IN PAR. 3208.1, CHANGE THE TITLE TO: "300,000 DOLLAR MINOR
CONSTRUCTION LIMIT."

F. IN FIGURE 3.1, CHANGE THE R2 RANGE TO 100,000 DOLLARS -
300,000 DOLLARS FOR MAJOR ACTIVITIES AND 10,001 DOLLARS - 300,000
DOLLARS FOR MINOR ACTIVITIES.//

R. D. NELBORN, GM-13, LFF-2, 6-08

R J WINGLASS, LTGEN, DC/SI&L, 61028

UNCLASSIFIED

021708Z JAN 92



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, DC 20380-0001

MCO P11000.5F Ch 4
LFF-2
13 Nov 92

MARINE CORPS ORDER P11000.5F Ch 4

From: Commandant of the Marine Corps
To: Distribution List

Subj: REAL PROPERTY FACILITIES MANUAL, VOLUME IV, FACILITIES
PROJECTS MANUAL

Encl: (1) New page inserts to MCO P11000.5F
(2) List of Effective Pages

1. Purpose. To transmit new page inserts to the basic Manual.

2. Action

a. Remove pages 2-5 through 2-16, 3-4 through 3-6, 4-1 through 4-6, 4-11, 4-12, and appendix E of the basic Manual and replace with corresponding pages contained in the enclosure.

b. Insert new pages 2-6a, 2-8a, 2-12a, 2-16a, and 4-12a in the basic Manual.

c. Upon insertion of this Change, the pages listed in enclosure (2) are current. Remove and destroy pages not listed.

3. Summary of Change

a. The classification for repair has been expanded to include modifications and additions to existing facilities if the work accomplished is required to comply with current life safety standards or environmental regulations.

b. Facility repair projects, in which the majority of the work to be accomplished is environmental in nature, are now evaluated separately from the regular repair projects. Each environmental project must now include proper documentation verifying an environmental deficiency exists.

c. Each facilities project must include proper documentation which meets the requirements of the National Environmental Policy Act regarding Categorical Exclusions, Environmental Assessments, and Environmental Impact Statements.

d. The validation sheets used to score projects within the various programs have been updated to reflect current requirements and priorities.

4. Chance Notation. Significant changes in the revised pages for this Change are denoted by an arrow (>) symbol.

5. Filing Instructions. This Change transmittal will be filed immediately following the signature page of the basic Manual.

6. Certification. Reviewed and approved this date.

R. A. TIEBOUT
Deputy Chief of Staff
for Installations and Logistics

DISTRIBUTION: PCN 10211280004

Copy to: 7000110 (55)
7000162 (10)
8145004, 005 (2)
7000144/8145001 (1)

UNCLASSIFIED

01 03 010242Z JUN 94 RR UUUU

ADMIN//ZYW//

CMC WASHINGTON DC//I-L/LFF//

AIG ZERO ZERO EIGHT

CG MOB CAMP LEJEUNE NC//PWO//

UNCLES //N11000//

MSGID/GENADMIN/CMC LFF//

SUBJ/MCO P11000.5F CH 5. REAL PROPERTY FACILITIES MANUAL VOLUME IV
/FACILITIES PROJECTS MANUAL//

REF/A/ACT/DOD/931110//

AMPN/REF IS THE 1994 DOD AUTHORIZATION ACT WHICH AMENDED 10 USC 2865
TO CLARIFY DOD ENERGY CONSERVATION MATTERS.//

RMKS/1. THIS CHANGE IS APPLICABLE TO MARINE CORPS ACTIVITIES ON PCN
1021128000 (FORMERLY DISTRIBUTION CODE CC).

2. THIS CHANGE IS EFFECTIVE IMMEDIATELY.

3. PURPOSE

A. TO DIRECT A CHANGE TO THE SUBJECT ORDER PER THE REFERENCE.

B. TO CLARIFY THE DEFINITION OF CONTINGENCY CEILING FOR WITHIN
SCOPE, WITHIN CONTINGENCY, CHANGE ORDERS TO HQMC FUNDED M2/R PROJS
REQUIRING CURRENT YEAR OM,MC OR REAL PROPERTY MAINTENANCE DEFENSE
FUNDS.

4. BACKGROUND

I-L, GENDIST

PCN 10211280005

R. D. NELBORN, LFF-2, 60852

R. A. TIEBOUT, LTGEN, L, 61030

UNCLASSIFIED

010242Z JUN 94

UNCLASSIFIED

02 03 010242Z JUN 94 RR UUUU

A. CONGRESS HAS AMENDED 10 UNITED STATES CODE 2865 EXPANDING THE AUTHORITY TO USE MAINTENANCE FUNDING TO REPLACE ENERGY INEFFICIENT EQUIPMENT OR SYSTEMS.

B. THE CONTINGENCY CEILING IS DESIGNED TO ALLOW LOCAL ACTIVITY COMMANDERS TO FUND WITHIN-SCOPE CHANGES WITH LOCAL FUNDS WITHOUT NOTIFYING THE CMC. IT HAS ALWAYS BEEN THE INTENT OF THIS POLICY THAT INSTALLATIONS RESERVE ADEQUATE FUNDING FROM WITHIN THEIR LOCAL BUDGETS TO FUND CHANGE ORDERS TO THESE PROJECTS. THIS PLACES THE BURDEN OF THE CHANGE WITH THE DESIGNERS OF THE PROJECT. CONTINGENCY FUNDS ARE NOT RESERVED AT HQMC TO PAY FOR THESE CHANGE ORDERS. FUNDS ARE TO BE REQUESTED OF HQMC ONLY AFTER APPROPRIATE LOCAL FUND SOURCES HAVE BEEN EXHAUSTED. AS A GENERAL RULE, HQMC FUNDS THE INITIAL AWARD OF M2/R2 PROJECTS, NOT CHANGE ORDERS. WHEN HQMC MUST FUND CHANGE ORDERS, OTHER M2/R2 PROJECTS HAVE TO BE CANCELED OR DEFERRED.

5. ACTION

A. ADD PARAGRAPH 4104.7 AS FOLLOWS:
THE REPAIR BY REPLACEMENT OF EQUIPMENT OR SYSTEMS, SUCH AS LIGHTING, HEATING, OR COOLING EQUIPMENT OR SYSTEMS CAN BE CLASSIFIED AS REPAIR IF THE PROJECT:

A. WILL ACHIEVE THE MOST COST-EFFECTIVE ENERGY SAVINGS OVER

UNCLASSIFIED

010242Z JUN 94

UNCLASSIFIED

03 03 010242Z JUN 94 RR UUUU

THE LIFE-CYCLE OF THE EQUIPMENT OR SYSTEM BEING REPAIRED, AND

B. WILL MEET THE SAME END NEED AS THE EQUIPMENT OR SYSTEM
BEING REPAIRED.

B. CHANGE PARAGRAPH 2005.10.C TO READ AS FOLLOWS:

WHEN IT IS DETERMINED A CHANGE ORDER IS NECESSARY AND THE COSTS ARE
ABOVE THE CONTINGENCY CEILING THAT HAS BEEN AUTHORIZED FOR LOCAL
PRIOR YEAR FUNDS ARE NOT AVAILABLE), A MESSAGE WILL BE SENT TO THE
CMC (LFF-2) WHICH WILL INCLUDE THE FOLLOWING INFORMATION:

C. ADD PARAGRAPH 2005.10.D AS FOLLOWS:

CHANGE ORDERS THAT ARE WITHIN-SCOPE AND WITHIN CONTINGENCY, REQUIRING
CURRENT YEAR OR REAL PROPERTY MAINTENANCE DEFENSE FUNDS, ARE EACH
INSTALLATION'S RESPONSIBILITY. IF LOCAL FUNDS ARE NOT AVAILABLE AND
THE CHANGE ORDER MUST BE ACCOMPLISHED, THE INSTALLATION WILL IDENTIFY
A COMPENSATORY M2/R2 PROJECT(S) FROM WHICH FUNDS WILL BE TAKEN TO
COVER THE CHANGE ORDER.//

UNCLASSIFIED

010242Z JUN 94

LOCATOR SHEET

Subj: Real Property Facilities Manual, Volume IV

Location: _____
(Indicate the location(s) of the copy(ies) of this
Manual.)

REAL PROPERTY FACILITIES MANUAL

RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Received	Date Entered	Signature of Person Entering Change
1	2 Feb 90			
2	4 Feb 91			
3	2 Jan 92			
4	13 Nov 92			
5	1 Jun 94			

REAL PROPERTY FACILITIES MANUAL

LIST OF FACILITIES MANUAL

1. The following is a list of pages in effect after the insertion of this Change. Missing pages should be obtained by requisitioning the basic Manual and/or pertinent Change(s) in accordance with MCO P5600.31E.

Page	Ch	Page	Ch	Page	Ch	Page	Ch
MCO P11000.5F	0	2-12a	4	4-8	3	A-2	0
i	0	2-13	0	4-9	0	A-3	0
iii	0	2-14	0	4-10	0	A-4	0
1-1	0	2-15	0	4-11	0	A-5	0
1-3	0	2-16	4	4-12	4	B-1	0
1-4	0	2-16a	4	4-12a	4	B-2	0
1-5	0	3-1	0	4-13	0	B-3	0
1-6	0	3-2	0	4-14	0	B-4	0
1-7	0	3-3	0	4-15	0	C-1	0
1-8	0	3-4	4	5-1	0	D-1	0
1-9	0	3-5	4	5-2	0	D-2	0
1-10	1	3-6	0	5-3	0	E-1	4
1-11	0	3-7	0	5-4	0	E-3	4
1-12	0	3-8	0	5-5	0	E-3	4
2-1	0	3-9	0	6-1	0	E-4	4
2-3	0	3-10	0	6-3	0	E-5	4
2-4	3	3-11	0	6-4	0	E-6	4
2-5	3	3-12	0	6-5	0	E-7	4
2-6	4	3-13	3	6-6	0	E-8	4
2-6a	4	3-14	3	6-7	0	E-9	4
2-7	0	4-1	0	6-8	0	E-10	4
2-8	4	4-3	4	6-9	0	E-11	4
2-8a	4	4-4	4	6-10	0	E-12	4
2-9	0	4-4a	4	6-11	0	E-13	4
2-10	0	4-5	0	6-12	0	E-14	4
2-11	0	4-6	0	6-13	0	E-15	4
2-12	4	4-7	0	A-1	0	E-16	4

REAL PROPERTY FACILITIES MANUAL

[illegible]

REAL PROPERTY FACILITIES MANUAL

CONTENTS

CHAPTER

- 1 INTRODUCTION
- 2 PROGRAM SCOPE AND IMPLEMENTATION
- 3 CONSTRUCTION
- 4 REPAIRS
- 5 MAINTENANCE
- 6 EQUIPMENT INSTALLATION

APPENDIX

- A DD FORM 1391
- B FORM NAVFAC 1101317
- C SUMMARY FOR CORRECTION OF FACILITY DEFICIENCIES
- D LISTING OF ACTIVITY ALPHA CODES
- E VALIDATION FORMS
- F INTERNATIONAL BALANCE OF PAYMENTS PROCEDURES
- G GUIDE FOR PAYMENT OF ADMINISTRATIVE COST TO
ENGINEERING FIELD DIVISIONS OF THE NAVAL FACILITIES
ENGINEERING COMMAND
- H ABBREVIATIONS/ACRONYMS

REAL PROPERTY FACILITIES MANUAL

CHAPTER 1

INTRODUCTION

	<u>PARAGRAPH</u>	<u>PAGE</u>
PURPOSE	1000	1-3
CONTENT	1001	1-3
APPLICABILITY	1002	1-3
PROGRAM FUNDS	1003	1-4
NAVAL FACILITIES ENGINEERING COMMAND SERVICES	1004	1-5
ACCOMPLISHMENT OF PROJECTS	1005	1-5
TERMS APPLICABLE TO ALL PROJECTS	1006	1-7
FRAUD, WASTE, -AND ABUSE PREVENTION	1007	1-12

REAL PROPERTY FACILITIES MANUAL

CHAPTER 1

INTRODUCTION

1000. PURPOSE. This Manual provides policy and procedures for managing the facilities projects at Marine Corps activities.

1001. CONTENT

1. The types of facilities projects covered in this Manual include minor construction, repairs, maintenance, and equipment installation funded from Operation and Maintenance, Marine Corps (O&M,MC).

2. Excluded from the provisions of this Manual are:

a. Projects financed from the Procurement, Marine Corps (PMC) appropriation. These projects may involve installed equipment/personal property (as defined herein) and installation/provision of same in "turn-key" contracts.

b. Projects for certain facilities and equipment that are provided to a contractor authorized by 10 U.S.C. 2353 and funded from the research, development, test, and evaluation (RDT&E) appropriation.

c. Projects involving family housing.

d. Regular military construction (MILCON) projects.

e. Nonappropriated fund (NAF) projects.

1002. APPLICABILITY. Commanders of major and minor Marine Corps activities shall comply with the contents of this Manual. Specifically, they shall:

1. Ensure that work descriptions, justifications, impacts, cost estimates, and drawings in all project documentation are complete, current, and accurate.

2. Following approval, maintain complete, current, and accurate records of program execution on actual project expenditures and changes to project scope and contracts.

3. Obtain all required authorizations, approvals, clearances, permits, and funds (or funding commitment) before initiating any project procurement action.

4. Use program funds only as authorized by Headquarters Marine Corps.
5. Review unprogrammed and emergent projects requirements to verify their necessity, urgency, and lack of local funding before submitting them to Headquarters Marine Corps.
6. Develop and execute the projects' program in a timely and effective manner to fulfill program targets and goals.

1003. PROGRAM FUNDS. The following O&MMC funds apply to the Headquarters Marine Corps Real Property Facilities Projects Program:

1. Functional Category M1/M2. Funds for repair. Repair is the restoration of a real property facility to such condition that it may be effectively used for its designated purpose by overhaul, reprocessing, or replacement of constituent parts of materials that have deteriorated by action of the elements or usage. M1 denotes repair projects which are funded at the local commanders level and M2 are repair projects funded at the Headquarters Marine Corps level.
2. Functional Category R1/R2. Funds for construction. Construction is the erection, installation, or assembly of a new real property facility; the addition, expansion, extension, alteration, conversion, or replacement of an existing real property facility; or the relocation of a real property facility. R1 denotes construction projects which are funded at the local commanders level and R2 are construction projects funded at the Headquarters Marine Corps level.
3. Functional Category P. Funds for other engineering support such as special surveys, studies, site investigation, and tests, that are not in direct support of preparation of project plans and specifications. Funds for DD Form 1391 (FY ____ Military Construction Project Data) (see appendix A) preparation may be charged to either functional code P or M2/R2 depending on these circumstances:
 - a. P funds are used for DD Form 1391 preparation when it is completely separate from preparation of plans and specifications. Studies, surveys, tests, or site investigations are P funded when performed before the Engineering Service Request (ESR) or prior to award of Architectural and Engineering (A&E) Firm contract to develop the project(s).
 - b. When DD Form 1391 preparation is integrated with preparation of plans and specifications for particular project(s) the ESR or A&E contract may be funded entirely with M2/R2 funds.

c. In-house engineering efforts can be used either for study preparation or plans and specification preparation. Since tracking of salaries to specific projects is labor intensive, a 50/50 split between P and maintenance real property funds may be used for public works engineering salaries.

4. Protect Design Requirements. A&E or Engineering Field Division (EFD) design of major repair projects is funded with M2 funds. Designs for minor construction are funded using R2/R1 funds as appropriate.

5. Budgeting Requirements. Each activity is required to submit field budget requirements for real property facilities as referenced in the current edition of MCO P7100.8.

1004. NAVAL FACILITIES ENGINEERING COMMAND SERVICES. The Naval Facilities Engineering Command (NAVFACENGCOM) provides technical support to Navy/Marine Corps activities through its EFDS, each serving a particular geographical area within the United States or overseas. Technical services provided the activities include consultation, facilities projects designs, and administration of construction contracts. Activities may obtain services by submitting written requests to the EFD serving their particular areas. O&MMC funds are authorized to pay for these services.

1005. ACCOMPLISHMENT OF PROJECTS

1. Commercial Contracts. The Commandant of the Marine Corps (CMC) policy is to accomplish all facilities projects (major repair, minor construction, and equipment installation projects) by contract to the maximum degree feasible.

2. Civil Service Labor. As outlined in the current edition of MCO 4860.3, Civil Service labor will be used under the following conditions:

a. When operation is necessary in the execution of the Marine Corps military mission, and private enterprise cannot meet security requirements.

b. Private enterprise cannot perform the service or provide the products necessary to meet current and mobilization requirements.

c. When procurement of a product or service from a commercial source would disrupt or delay an essential program.

3. Military Labor. The use of military personnel assigned to facilities maintenance organizations will be similar to the provisions for Civil Service labor preceding, and in cases where security requirements dictate the use of military labor.

a. The use of Fleet Marine Force (FMF) engineer units to accomplish facilities projects will be per the current edition of MCO 5312.13.

b. The use of Naval Construction Forces (NCF) will be per the current edition of OPNAVINSTs 5450.46 and 5450.188. Some facilities projects may be accomplished by NCF accomplished by NCF within the United States, but NCF are primarily used at overseas activities. Activities may submit projects proposed for NCF accomplishment through their respective EFDs to the NCF Headquarters, Washington, DC. Final selection of projects rests with the NCF. The approved project may be accomplished by active NCF units or by contingents of the NCF Reserves. Projects for NCF accomplished must have essential training benefits to the NCF.

c. The use of all other military labor for real property maintenance, repair, or construction will be limited to self-help as defined in the current edition of MCO P11000.7.

4. Reimbursements. Projects for facilities maintenance, repair, construction, and equipment installation are reimbursable to the host activity from the following sources:

a. NAF Activities. These activities are so diverse that standard criteria cannot be developed applicable to all. For specific reimbursement responsibilities, refer to NavCompt Manual, volume 3.

b. Family Housing. The Family Housing Management Account, Defense, will reimburse for all expenses identifiable to the Operations and Maintenance (O&M) of family housing facilities.

c. Marine Corps Industrail Fund (MCIF). MCIF will reimburse the O&M appropriation for all identifiable expenses related to the O&M of real property. This excludes major repair caused by an Act of God and construction costing over \$200,000.

d. Department of Defense (DoD) Holding (Disposal) Activities. All costs for the following are reimbursable: Utilities, roads and grounds maintenance, other real property maintenance, material maintenance, minor construction, fire protection, refuse collection, custodial service, personnel services, management engineering, comptroller, administrative services, etc.

a. RDT&E Funds. RDT&E Funds may be used to reimburse the O&M appropriation for maintenances rehabilitation, and operation of facilities.

f. Host/Tenant Agreement. When a written agreement exists between the base and the tenant activity for the accomplishment of projects, reimbursement will be as specified in the Host/Tenant Agreement.

1006. TERMS APPLICABLE TO ALL PROJECTS. Terms and definitions are contained in the chapters of this Manual to which they primarily apply. In addition, the following general terms and definitions apply:

1. Real Property. Land and all facilities added to the land for which the U.S. Government has right, title, or interest.

2. Real Property Maintenance Activities. The various functions for the maintenance and repair of facilities; the accomplishment of minor construction, the operation or purchase of utilities, and the provision of operating services and other engineering support.

3. Activity. An activity is categorized mainly by the overall physical size into either a major or minor activity. For the purposes of this Manual, there are four minor activities and twenty major activities within the Marine Corps as follows:

a. Minor Activities

- (1) Headquarters Battalion, Henderson Hall, Washington, DC.
- (2) Marine Barracks, 8th and I Sts., Washington, DC.
- (3) Camp Elmore, Norfolk, Virginia.
- (4) 1st Marine Corps District, Garden City, Long Island, New York.

b. Major Activities

- (1) Marine Corps Logistics Base (MCLB), Albany, Georgia.
- (2) MCLB Barstow, California.
- (3) Marine Corps Air Station (MCAS), Beaufort, South Carolina.
- (4) Marine Corps Base (MCB), Camp Butler, Japan.

- (5) MCAS Cherry Point, North Carolina.
- (6) MCAS El Toro, California.
- (7) MCAS Futenma, Japan.
- (8) MCAS Iwakuni, Japan.
- (9) MCAS Kaneohe Bay, Hawaii.
- (10) MCB Camp Lejeune, North Carolina.
- (11) MCAS New River, North Carolina.
- (12) Marine Corps Recruit Depot (MCRD)/Eastern Recruiting Region (ERR), Parris Island, South Carolina.
- (13) MCB Camp Pendleton, California.
- (14) MCAS Camp Pendleton, California.
- (15) Marine Corps Development and Education Command, Quantico, Virginia,
- (16) MCRD/Western Recruiting Region (WRR), San Diego, California.
- (17) Camp Smith, Hawaii.
- (18) Marine Corps Air Ground Combat Center, Twentynine Palms, California.
- (19) MCAS Tustin, California.
- (20) MCAS Yuma, Arizona.

4. Installation Commander. A commanding officer or equivalent of an installation having fixed boundaries within which all persons are subject to the military jurisdiction and the authority of the commanding officer; e.g., the commanding general, commanding officer, or in the case of the 1st Marine Corps District, the Director.

5. DoD Category Code. A three-digit system of numbering and common nomenclature for Classes 1 and 2 plant property; i.e., land, buildings, structures, and utilities. (See the current edition of NAVFAC P-72, Department of the Navy Facility Category Codes.)

6. Plant Property Classes. Plant property (see the NavCompt Manual, volume 3, chapter 6) is briefly identified as follows:

a. Real Property

- (1) Class 1, land.
- (2) Class 2, buildings and improvements (structures, roads, playing fields, etc.).

b. Personal Capital Plant Equipment

- (1) Class 3, equipment (other than industrial plant equipment).
- (2) Class 4, industrial plant equipment.

7. Organic (Minor) Property. Personal property with a unit cost greater than \$5,000. Also includes equipment which does not meet the criteria of plant property, regardless of cost.

8. Facility. A building, structure, or other improvement to real property. A facility will be assigned only one primary three-digit basic category code, based on the primary functional use. (See NAVFAC P-72.)

9. Relocation and Change in Designated Uses. Relocation or change of the designated use of a facility shall be accomplished per the current edition of MCOs P11000.14 and P11000.12.

10. Project. A single planned undertaking of construction, alteration, repair, or maintenance work, either separately or in combination, necessary to satisfy a finite requirement.

11. Project Costs. The total costs associated with the completion of a specific project to include all funded and unfunded costs.

12. Funded Project Costs. Funded costs on all projects include:

a. Civilian Labor. Direct activity labor charges of civilian employee, to include acceleration of direct labor costs to cover leave, holiday pay, and similar items.

b. Material. The cost of direct material used to accomplish the project. Government material, furnished the contractor, shall be included, using appropriate prices, and shall be separately identified in the estimate.

c. Equipment. The cost of all built-in equipment. Government furnished equipment shall be included, using appropriate prices, and shall be separately identified in the estimate.

d. Land. The cost of land to be acquired for the proposed project under the authority of 10 U.S.C. 26 2.

13. Funded costs for minor construction projects include:

a. Transportation Costs. Transportation costs applicable to materials and supplies, (rented equipment and Government-owned equipments.

Ch-1 b. Overhead. NAVFACENGCOM overhead costs, for supervision, inspection, and overhead (SIOH) are chargeable to O&MMC funded projects. The SIOH cost is either 6 percent of the project cost within CONUS or 6.5 percent of the project cost oconus and is to be added to the total cost for all minor construction projects accomplished by contract. Also, include that portion of activity overhead or support cost for an additional costs that would not have been incurred, were it not for the project.

c. Surplus Items. Any item, material, supplies, or item of installed equipment obtained from surplus stocks within the Marine Corps, other military departments, comparable DoD component, or as excess distribution from other Government Agencies. Costing of surplus items will be per NavCompt Manual, volume 7.

d. Travel and Per Diem Applicable to Troop Labor. The cost of travel and per diem applicable to engineer battalions or NCF labor is normally a funded project cost, except when the primary reason for the deployment is training. Cost of travel and per diem for troop labor shall be included only when a deployment is solely to accomplish a particular project.

e. Equipment Usage. Costs applicable to maintenance and operation of Government-owned equipment used on the project in the construction work.

14. Unfunded Project Costs. Unfunded project costs shall be shown on the DD Form 1391 and the Form NAVFAC 11013/7 (Cost Estimate). (See appendixes A and B.) The following unfunded project costs shall be included for statistical purposes and shall be clearly identified on all projects:

a. Military Labor. All costs of military personnel appropriations.

b. Equipment Depreciation. Costs applicable to the depreciation of Government-owned equipment.

c. Nonreimbursable Items. The cost of materials, supplies, and items of installed capital-type equipment which have been obtained specifically for the project on a nonreimbursable basis, either as excess distributions from another Defense component or as excess distributions from other Government agencies. Activities within the Department of the Navy are prohibited from using materials, supplies, or items of installed capital-type equipment (Plant Property Class 2) on their own minor construction projects on a nonreimbursable basis. Pricing of property to be treated as unfunded costs should be at the value stated by the owning activity if available, or at the estimated fair value per pricing procedures for disposal material.

d. Planning and Design Costs. All Ace services, including preparation of project plans and specifications (PP&S), whether performed in-house or by contract.

15. Backlog of Maintenance and Repair (BMAR) Report and Projects Plan. An annual report of physical maintenance and repair deficiencies of real property Class 2 and the estimated costs of correcting these deficiencies. (See MCO P11000.7.)

16. Annual Listing of O&MMC-Funded Minor Construction Projects. An annual list of minor construction projects which expresses the activity's deficiencies in construction requirements to be validate by Headquarters Marine Corps in the coming year. This listing is due at Headquarters Marine Corps on 1 October.

17. Validation of Projects. Validation (annual on-site review of all M2/R2 projects) shall be performed per MCO P11000.7 and paragraph 2003, following, of this Manual.

18. Current Working Estimate (CWE). The CWE is the government cost estimate for a specific project. It is the sum of all funded costs. Note that it does not include A&E design funds. Since it is a current estimate, it must be revised as required. The revised estimate will be sent to the CMC (LFF-23 for update of the project status. This revised estimate will include a DD Form 1391 and an explanation for the revision. The revised form will have the original date and date of revision along with interim revision dates.

19. Contingency Ceiling. The contingency ceiling is an amount which is added to the project CWE to calculate the authorized cost of the project. The contingency ceiling is designed to allow the local activity commander to fund within scope change orders with local funds without notifying the CMC. The nature and cost of the project will generally define the contingency ceiling (usually 3-15 percent of the project CWE).

20. Operating Services. Municipal-type activities such as police and fire protection, janitorial service, trash removal and disposal pest management, snow removal, and street cleaning.

1007. FRAUD, WASTE, AND ABUSE PREVENTION

1. With the increase in volume of large dollar projects there must be a renewed emphasis to prevent fraud, waste, and abuse (FWA). In the past FWA has been largely attributed to an agency's lack of internal controls. The Marine Corps Real Property Maintenance Activities (RPMA) programs must establish or strengthen controls to deal with potential FWA problems such as:

- a. Lack of adequate and proper facilities maintenance resulting in untimely and costly repairs or replacements.
- b. Classifying construction as repair to use nonconstruction funds to do construction (R1/R2) projects.
- c. Incrementing construction to avoid MILCON planning and programming.
- d. "Goldplating" or procuring more goods and services than needed.
- e. Paying unreasonable prices for the goods and services.

2. The activity commander will insure the Facilities Projects Program complies with FWA requirements contained in the current edition of MCOs 7510.5 and 5200.24. These directives provide policies and procedures to:

a. Establish and maintain accounting and internal control systems over all funds, property, and other assets for which the command is responsible. This will ensure that:

- (1) Obligations and costs comply with applicable law.
- (2) All funds, property, and other assets are safeguarded against waste, loss, unauthorized use, or misappropriation.
- (3) Revenues and expenditures are recorded and properly accounted for.

b. Annually evaluate and report on the internal control system per MCO 5200.24 as to their effectiveness and, if applicable, to provide a plan of corrective action.

3. See appendix H for all abbreviations/acronyms.

REAL PROPERTY FACILITIES MANUAL

CHAPTER 2

PROGRAM SCOPE AND IMPLEMENTATION

	<u>PARAGRAPH</u>	<u>PAGE</u>
PROGRAM SCOPE	2000	2-3
MONETARY LIMITATIONS	2001	2-4
PROGRAM DEVELOPMENT	2002	2-6
ON-SITE SURVEY OF PROGRAM PROJECTS	2003	2-7
SUPPLEMENTAL PROJECTS	2004	2-9
PROGRAM EXECUTION	2005	2-10

FIGURE

2-1	PROJECT FILE CHECKLIST	2-16
-----	----------------------------------	------

REAL PROPERTY FACILITIES MANUAL

CHAPTER 2

PROGRAM SCOPE AND IMPLEMENTATION

2000. PROGRAM SCOPE

1. Local Activity Facilities Projects Program. Local activity M1 and R1 projects are exempt from the provisions revisions of this Manual except as follows:

a. Repair projects (M1) with funded costs exceeding both \$200,000 and 50 percent of the replacement value of the facility will be submitted to Headquarters Marine Corps for approval. (See paragraph 4002.4, following, and figure 4-1.)

b. Commanders will maintain adequate controls and documentation for M1/R1 projects.

c. M1/R1 projects which support operations, training, and maintenance, and R1 projects which are associated with repair projects, should receive special emphasis. Priority for minor construction (in descending order) should conform to the following:

(1) Operations type facilities.

(2) Training.

(3) Maintenance.

(4) Utilities.

(5) Habitability/messhalls.

(6) Storage.

(7) Morale, welfare, and recreation (regulations subject to change on 1 October 1987).

d. Commanders shall convene a local projects review board to prioritize all R1 projects.

e. Commanders shall maintain a list of those R1 projects accomplished during the fiscal year as follows:

(1) Project Number.

(2) Description.

(3) Cost.

(4) M Project Number supported (when applicable).

This list shall be retained for record purposes by fiscal year and will be reviewed by inspection personnel.

2. Headquarters Marine Corps Facilities Projects Program. The Headquarters Marine Corps Facilities Projects Program is a centrally-managed, interrelated program of developing, prioritizing, and funding major repair, minor construction, and equipment installation projects at Marine Corps activities to include:

a. Funding for engineering investigations and studies related to facilities and projects, design for approved facilities projects, and minor acquisition of land.

b. Funding for change orders to projects during contract execution in excess of assigned contingency ceilings and unforeseen requirements resulting from mission changes or natural disasters.

3. Normally, all projects in the program will exceed the approval authority of the activity commanders.

4. In any given fiscal year, obligation of funds should be fairly evenly distributed throughout the fiscal year. Eighty percent of funds should be obligated by July 1, and there should be no year-end rush to obligate in September.

2001. MONETARY LIMITATIONS

1. Projects Included. Projects to be included in the Headquarters Marine Corps Real Property Facilities Projects program together with the monetary limits are:

Ch 3 a. Construction Projects. Minors construction projects having a funded cost between \$100,001 dollars and \$3,000,000 dollars. Minor activities shall request funding approval for construction projects exceeding an estimated funded cost of \$10,000.

b. Special Projects. Minor construction projects which are used for armory and ammunition storage security upgrade (AMMO), Chapel Life Extension Program (CLEP), fire, environment, etc., having a funded cost between \$1 and \$200,000. Activities may approve and fund projects between \$1 and \$100,000 using local funds.

c. Repair Projects. Repair projects having a total funded cost between \$300,001 and \$3,000,000. Projects exceeding \$3,000,000, and those above \$200,000 and exceeding 50 percent of the replacement cost, require Assistant Secretary of the Navy (Shipbuilding and Logistics) (ASN(S&L)) approval.

Activities shall prepare documentation for such projects for submission to the ASN(I&E), via CMC (LFF-2). Minor activities shall request funding approval for repair projects at an estimated funded cost of \$25,000 for repair projects at an estimated funded cost of \$25,000 or over.

Ch 3 d. Equipment Installation Projects. Equipment installation projects having a funded cost between \$100,001 dollars and \$300,000 dollars. Equipment to be installed in these projects must be Class 3 as classified in NavCompt Manual, volume 3, paragraph 036301. Minor activities shall request project approval for equipment installation projects exceeding an estimated total funded cost of \$10,000. Funding of equipment installation projects shall be accomplished per MCO P7100.8 and chapter 6 of this Manual.

e. Combination or Renovation Projects. Projects which include a combination of construction, repair or equipment installation, shall be separated and submitted as individual projects; and the approval authority for each type of project shall apply. If a project which includes construction is so integrated as to preclude separation, the entire project shall be submitted as a construction project.

2. Projects Excluded. Projects to be excluded from the program are as follows:

a. Local Projects. Project normally within the approval authority of the activity commander. (See paragraph 2000.1, preceding, and figures 3-1 and 4-1.)

Ch 3 b. Unspecified Minor MILCON and MILCON Projects. Construction projects having a total funded cost of \$300,001 dollars and over. (See MCO P11000.12.)

c. Family Housing Projects. Construction and major repair projects, as addressed in this Manual, do not apply to Marine Corps family housing improvements and repair projects. Guidance pertaining to family housing projects is contained in MCO P11000.15.

d. NAF Projects. Projects to be funded solely from NAF's. (See MCO P11000.12.)

e. Commissary Store Projects. Projects to be funded from commissary store profit reserves. (See MCO P11000.2.)

f. Relocatable Building Projects. Projects involving the erection of relocatable buildings. (See MCO P11000.12.)

g. MCIF. See NavCompt Manual, volume 5.

2002. PROGRAM DEVELOPMENT. Activities will submit their repair, minor construction, and special program projects in October of the fiscal year, 2 years prior to the fiscal year of the subject project program.

1. Activities will submit proposed major repair projects in the BMAR report and projects plan which is due annually at Headquarter Marine Corps by 10 October. Activities will assign a Headquarters Marine Corps project number to each Deficiency Code 2, and those Deficiency Code 3 line items which are proposed for the Headquarters Marine Corps Facilities Projects Program per paragraph 2002.3d, following. The project numbers will be indicated in the BMAR reports and projects plan.

2. Submission of the annual listing of O&MMC Funded Minor Construction Projects, including special program projects, will be due at Headquarters Marine Corps by 1 October. Activities will list all minor construction projects on NAVMC Form 10956 (Summary for Correction of Facility Deficiencies) or computer facsimile. Group the regular program projects separately from the special program projects. Complete the NAVMC Form 10956 per appendix C.

> 3. Special Programs Projects List. Currently, there are programs for minor construction work to satisfy requirements in the following areas:

- a. Chapel Life Extension Program (CLEP).
- b. Environmental Protection Pollution Abatement (ENV).
- c. Armory and Ammunition Storage Security Upgrade (AMMO).
- d. Safety (other than occupational safety/health) (SAEE).
- e. Occupational Safety and Health Act (OSHA).
- f. Fire Protection (FIRE).
- g. Energy and Utilities Initiatives (EIP).
- h. Natural Resources.

Special program projects will be prioritized separately under their respective special program in decreasing priority. Because these projects fall under Headquarters Marine Corps Special Program Project funding, there is no minimum funding limit required in order to request funds. Under the ENV special projects program, the activity will evaluate and classify each project with an EPA category of Classes I, II, or III per MCO P5090.2. This classification

will be annotated on the DD Form 1391 in Block 10, Description of Proposed Work. Additionally, activities will submit with each project all environmentally related documentation required by MCO P5090.2.

2-6a
Ch 4

4. Numbering System for Facilities Projects Program Project Submittals. All activity projects submitted for consideration in a particular fiscal year shall be assigned a project number by the originating activity per the following. Under this numbering system each activity has a unique set of project numbers to identify major repair, minor construction, and equipment installations projects. Those projects which are approved will carry the same project number through to completion of the project. Those submitted projects which are not approved in the fiscal year program for which nominated should be reassigned a new project number when submitted for a future program.

a. Activity identification is accomplished by a two character alpha code shown in appendix D. These two alpha characters are the first two letters in the project number.

b. After the two character alpha code, a three digit numeric series of project numbers is developed. The first number in the three digit series denotes the last digit in the fiscal year program for which the project submission is made.

c. When the total number of M2 or R2 projects proposed for the program exceeds 99, the three digit numeric code in the project number will be increased to four numeric digits for those projects numbering above 99 only. For example, the project numbers assigned to projects following KB699M will be KB6100M, KB6101M, KB6102M, etc. Do not use four numeric digits for projects numbering 99 and lower.

d. All M2 or R2 projects under one activity identification alpha code will be numbered continuously. The numbering of minor construction projects shall be sequential and include the regular program projects through the several special programs in any order. Continuity shall also extend to supplemental projects and projects at satellite activities using the same activity identification code. Continuity will avoid duplication of project numbers within the same activity identification code.

2003. ON-SITE SURVEY OF PROGRAM PROJECTS

1. Headquarters Marine Corps On-Site Survey. Following submissions of the BMAR Report, Projects Execution Plan, and the Annual Listing of O&MMC-Funded Minor Construction Projects by activities, Headquarters Marine Corps will send a representative to each activity in the 1st quarter of the fiscal year to survey on-site the projects proposed in the submissions. Each project will be surveyed using Headquarters Marine Corps validation forms. (See appendix E and MCO P11000.7.)

> 2. Validation Forms. Validation forms for major repair, minor construction, and special program projects will be reproduced locally from copies provided by the CMC (LFF). Activities will reproduce the forms located in appendix E only if the CMC (LFF) does not provide updated copies of the forms by 30 October of each fiscal year. Prior to the on-site survey visit, activities will complete the heading of each survey form and provide this form to the Headquarters Marine Corps representative.

> 3. Documentation Required for On-Site Survey. In addition to the validation form, each project to be validated requires a DD Form 1391 front page. Activities will prepare the DD Form 1391 front page per appendix A. The last item included in the DD Form 1391 front page shall be "Impact If Not Provided." The Headquarters Marine Corps representative cannot survey a project without a completed survey form and DD Form 1391 front page. Also, figure 2-1, Project File Checklist, identifies the minimum requires documentation for repair and minor construction projects. This minimum required documentation should be included with the project folders for the Headquarters Marine Corps representative to adequately survey the project.

4. Year of Execution. Projects validated will normally be planner for execution 2 years from the year of validation. Under extenuating circumstances, the Headquarters Marine Corps representative will validate projects for near term execution. Projects will be numbered to reflect the planned year of execution.

5. Approval of Special Programs Projects. Special program projects are surveyed by the Headquarters Marine Corps representative concurrently with major repair and regular minor construction projects. The respective special program manager at Headquarters Marine Corps receives the surveyed projects from all the activities and compiles them into a single prioritized list. The validation score is not necessarily the deciding factor in ranking a project on the list. Other factors which the program manager deems relevant in prioritizing projects are also applied and may override the survey score. Activities are notified of projects approved for design and funding during the current fiscal year by message. The projects are listed in priority sequence. The prioritized list is made annually and is not perpetual. Projects not selected and authorized for design or funding in one fiscal year must be renumbered and resubmitted for the following fiscal year(s).

6. Initial and Final Cutoff Scores. The major repair and minor construction (excluding special programs) projects are approved for the program based primarily upon the survey scores. Low scoring projects will not normally be funded for design.

7. Post Validation Message. Immediately after an on-site survey, each activity will transmit, by message, a list of validated projects. Provide separate lists for M2 and R2 projects. Compute A&E funds required for those projects to be designed by the EED or contract using 10 percent of the project CWE. Prepare the message before the Headquarters Marine Corps representative departs the activity for the representative's review and concurrence. Use the following format (read in six columns): Headquarters Marine Corps Project Number., Project Title; BMAR or Project Plan Line Item Number Number (M2 projects only), Validation Score, CWE, and A&E funds required. Close message with statement: "Headquarters Marine Corps representative (insert name) concurred on (insert date)." An information copy of the message shall be provided to the cognizant EFD.

2004. SUPPLEMENTAL PROJECTS. Supplemental projects are those projects submitted after the on-site surveys are completed. If approved, these are included in the program without an on-site survey.

1. HA supplemental project shall be submitted only when: one or all of the following criteria is satisfied:

- a. The project is urgently required to support a change in mission.
- b. Restoration or repair is required immediately because of an Act of God or similar circumstance beyond the control of the activity commander.
- c. The project is self-amortizing within 3 years following the completion of the project. Economic justification for such projects shall be per the current edition of NAVFAC P-422.
- d. A hazard to life and property equating to the Occupational Safety and Health Act, Risk Assessment Code (RAC) I, exists and cannot be corrected without the requested project.
- e. The project is urgently required due to an unforeseen requirement or a change in environmental regulations/compliance orders which jeopardizes continued use of the activity unless a corrective project is initiated.

2. The request for approval of a supplemental project shall include a detailed explanation of the circumstances generating the requirement and the following certification/documentation:

- a. Project is submitted for approval as fiscal year () supplemental project pursuant to the current edition of MCO P11000.5, paragraph 2004.1(). (Insert appropriate fiscal year and subparagraph no. (a, b, c, d, or e) in the parenthesis.)
- b. A current DD Form 1391.
- c. The facility provided by this project is supported by an up-to-date facility planning document (FPD) showing current Basic Facilities Requirements List (BFRL) quantity assets and facility planning action.

d. Site location has been approved.

3. An economic analysis will be attached as an enclosure if the cost of the project is over \$200,000 and 50 percent of the replacement cost. Paragraphs 2004.2a and b, preceding, are required for M2 and R2 proposed supplemental projects. Paragraphs 2004.2c and d, preceding, are required for R2 supplemental projects only. The request shall be submitted with complete project documentation as required.

2005. PROGRAM EXECUTION

1. Execution Sequence. After validation, execution of the program follows these steps in sequence:

- a. The CMC approves projects for design and provides A&E funds.
- b. Activities advise the CMC of when design will be ready and priority of project (project's forecast).
- c. Activities submit documentation for all projects and PP&S for selected projects.
- d. The CMC grants authority to advertise and commits funds.
- e. Activities advise of low bids and request funds.
- f. The CMC allocates funds.
- g. Activities execute contract and obligate funds.
- h. Activities and the CMC process change orders above contingency ceiling. Change order within contingency ceiling is funded by the activity with local funds. If no funds are available the activity requests funds from the CMC (FDB).

2. Project Design. Program execution begins with a message from the CMC (LFF-2) listing the projects (R2/special programs) which are approved for A&E design. This message will normally be sent during January. M2 approved projects will have been authorized for design during validation.

- a. Normally, Headquarters Marine Corps will preposition A&E funds at the activities prior to the on-site surveys. These funds will enable activities to execute design contracts upon completion of validation and begin design of the projects immediately after notification of the projects making the program. As early as possible, but not later than the end of September, activities shall submit estimates of A&E funds required for the upcoming fiscal year.

b. The estimates should be accurate and reasonable; i.e., projects to be designed in-house should not be included in the estimate.

c. In submitting the estimate, activities will use the following format (read in four columns): Number of Project to be validated (separate M2 and R2 projects total), short titles, CWE total, and total A&E funds required.

3. Contract Advertisement Forecast. A forecast of when projects will be ready for contract advertisement shall be provided by the activity semiannually by 1 March and 15 September of each year. The 15 March submission will be used by the CMC to plan the straddle program and the 15 September submission will be used to develop the next fiscal year program. In submitting the forecast, activities shall use the following format (read in five columns): project number, short titles (separate M2 and R2 projects), CWE, when available for advertisement and priority.

4. Documentation

a. Each project approved for the program requires documentation. The basic documents required for each approved project are:

(1) A completed DD Form 1391. (See appendix A.) When construction projects are combined with repair or equipment installation and the type or work is separable (see paragraph 2001.1d, preceding), a separate DD Form 1391 shall be completed for each type of work and cross-referenced.

(2) NAVFAC Form 11013/7. (See appendix B.) This serves as an all purpose document for general estimating for facilities projects to be supported from all types of funds. Cost estimates shall be sufficiently detailed to permit accurate determination of scope of work required, appropriate level of approve, authority, and adequacy of requested funds. A lump sum allowance/factor for contingency funds shall be included.

(3) Site location maps, when appropriate, showing pertinent physical features, such as distances from the proposed improvement to existing structures and utility systems, proposed utility systems, and road extensions pertinent to the project.

(4) Approved sits approval request (NAVMC 11069) for minor construction projects, if necessary per MCO P11000.12.

(5) Single line sketches in sufficient detail to enable evaluation and confirmation of cost estimates by the CMC (LFF).

(6) FPD for the category codes affected by the project (required for all projects). The FPD will show up-to-date BFRL, assets and facility planning actions. (See MCO P11000.12.) If the requirement for the facility is not supported by the FPD, projects will not be reviewed by the validator.

> (7) Pollution Control Report (PCR) for all environmental projects, to include environmental repair. Prepare and forward the PCR to the CMC (LFL) for inclusion in the OMB, A-106 report. No environmental project will be considered for approval unless project documentation includes a copy of the PCR.

> (8) An economic analysis is required as an enclosure if the cost of the project is over \$200,000 and 50 percent of the replacement cost or when the repair costs for an individual project exceeds \$2,000,000. Submission of an economic analysis is encouraged for all projects, however, because this adds strength to the documentation and assists in the prioritization of the projects. In all economic analyses submitted, the status quo option (i.e., the continued use of the facility with only routine maintenance) should be addressed.

> (9) Any environmental or environmental repair project which is an EPA category Class I or II deficiency must include in the project documentation a copy of the noncompliance or enforcement letter, or a copy of the notice or regulation which requires implementation of the project prior to a specific deadline.

> (10) Documentation of all facilities projects covered in this Manual, as defined in paragraph 1001.1, preceding, will contain information required by the National Environmental Policy Act (NEPA) regarding categorical exclusions, environmental assessments, or environmental impact statements. The project folder will not be complete without this information, and the Headquarters Marine Corps representative will not validate the project without this documentation. (See MCO P5090.2 for further guidance.)

> b. Additional documents which may be required, or submitted at the discretion of the activity, depending on the specific requirements of a project are: Photographs to justify the requirement for the project, especially in connection with repair.

c. Activities in foreign countries should include international balance of payments (IBOP) computations and determinations conforming to appendix F herein and the current dollar/foreign currency exchange rate in the DD Form 1391.

> d. After the submission of the initial project documents, activities will provide revised documents for each project in which the cost has changed by 20 percent or more during design to reflect the updated cost of the final project plans, specifications and engineering estimates.

> e. Incomplete submissions will require further information. Until the requirements of this Manual are completely satisfied, authority to advertise and commitment of funds for a project may not be granted. The ED Form 1391, front page, required by paragraph 2003, preceding, suffices for on-site survey purposes only and is incomplete documentation for an approved project. Incomplete documentation at the time of HQMC's validation visit may result in lower validation scores.

> f. Construction of new Class 2 plant property facilities, and the relocation of facilities at activities under the CMC (LFF) authority require site approvals. Site approval will be per paragraph 3003 of MCO P11000.12C.

> g. A major repair project whose total funded cost exceeds \$3,000,000 and 50 percent of RPV requires ASN(I&E) approval. Activity commanders will submit project documentation and an economic analysis for those projects requiring additional approvals as early as possible to avoid delays in obtaining authority to advertise and reservation of funds.

h. Activities will submit all required documentation for each project approved for design. The documentation package may be submitted as completed for each individual project, but in all cases documents must be received by 1 October of the fiscal year of proposed contract award. Projects that require PP&S review shall have documents submitted along with PP&S.

i. To ensure submissions are complete, Headquarters Marine Corps will use the checklist at figure 2-1 for each approved project.

5. PP&S Review. Certain approved projects will require the review of the PP&S by Headquarters Marine Corps. The determination of whether or not a project requires PP&S review is based upon the scope of work and other project data provided on the DD Form 1391, front page, submitted for validation. Notification of projects for review will be published by the CMC (LFF-2) in the 1st quarter of the fiscal year. Review of projects will be at the 35 percent stage of the design phase drawings. Once the drawings are received at Headquarters Marine Corps, the review process normally will take 1 month. Should the cost estimate based on project plans and specifications differ from the initial DD Form 1391 estimate, the DD Form 1391 should be revised.

6. Authority to Advertise. Activities shall request (via message or letter) authority to advertise for all approved projects. The request will be made only for projects which 'aa ready for solicitation. If the project is not advertised within the time period specified, the funds committed to the project may be withdrawn.

7. Bid Opening Date (BOD). Activities will report bid opening dates for all projects granted authority to advertise immediately upon such dates being established. Any change to a scheduled BOD should also be promptly reported. A phone call will suffice for this requirement.

8. Bid Opening and Request for Funds. In requesting funds for contract award, use the following format:

From: Activity

To: CMC Washington DC Info: Marine Corps Area Commands
NAVFAC Engineering Field Divisions
Others As Required

Subj: FY Program Facilities Projects Program, Headquarters Marine
Corps No. ____, (title))or Project Nos. As Listed)

1. Government Estimate: (\$). (See note 1 below).
2. Range of Bids: (X no. of bids from (\$) to (\$)).
3. Confirmation Bid: (\$). (See note 2 below.)

4. Bid Expiration Date: (Day) (Month) (Year).
5. Supervision, Inspection and Overhead (SIOH): (\$). (See note 3 below.)
6. Post Contract Award Cost (PCAC): (\$). (See note 3 below.)
7. A&E Cost: (\$)(FY), (\$)(FY _ . (See note 4 below.)
8. Request confirmed low bid funds only, or Request funds as follows:

Confirmed Low Bid - (\$)

Post Contract Award Cost - (\$)

Total Funds Requested - (\$) (See Note 5 below).

9. Recommended contingency ceiling for change orders: (\$). (See note 6 below.)

- NOTES:
1. Explain any difference between government estimate and the funds reserved at Headquarters Marine Corps.
 2. If a low bid is not confirmed, so state and provide explanation why an unconfirmed low bid should be funded. If funding a low bid exceeding government estimate (10 percent) explain why.
 3. Explain any SIOH cost and post contract award cost for which funds are requested. (See appendix G.)
 4. Indicate the fiscal year in parentheses following the dollar amount.

9. Straddle Programs

a. Bids scheduled for opening from the last week of August through the second week of September in the current fiscal year shall have a 60-day bid expiration period. These bids, will then "straddle" the current year and following fiscal year. The "straddle bids provide the flexibility of using either current year or the following year funds.

b. Projects scheduled for "straddling" are subject to Headquarters approval. Projects are allowed into the straddle only after all program funds authorized for the current year program have either been allocated or reserved. The number of projects approved for the "straddle" is therefore

determined by the amount of additional funds that are expected to be available and must be obligated before the year end. Another consideration is the amount of funds which will be available during the 1st quarter of the new fiscal year. If activities propose more "straddle" projects than those funds will allow, some of the projects must be excluded from the straddle.

10. Change Orders

a. There are three broad categories of change orders:

(1) Unforeseen conditions. These are change orders which were beyond the A&Es ability to anticipate.

(2) Design. These are changes that have resulted from poor design or lack of design. The A&E may be responsible for some of the additional cost incurred. It is NAVFACs responsibility to follow-up on design change orders and investigate A&E liability.

(3) Customer requested. These are changes that the activity requests be made to the contract.

b. Concerted efforts shall be made to keep change orders to a minimum. Change order rates will be monitored by the activity, with records retained for review by Headquarters Marine Corps inspectors.

c. When it is determined a change order is necessary and the costs are above the contingency ceiling that has been authorized (or local funds are not available), a message will be sent to the CMC (LFF-2) which will include the following information:

d. Change orders that are within-scope and within contingency, requiring current year or real property maintenance defense funds, are each installation's responsibility. If local funds are not available and the change order must be accomplished, the installation will identify a compensatory M2/R2 project(s) from which funds will be taken to cover the change order.

(1) Historical Data. To include the original amount of the contract and the year funded, the A&E amount and year funded and the list of all change orders (if any) to include the amount and year funded.

(2) Current Data. To include the title of change order, the amount and year of funds, the circumstances and justification for the change order, impact if not provided and if A&E liability will be pursued.

REAL PROPERTY FACILITIES MANUAL

1.	Headquarters Marine Corps Project Number	_____
2.	Project Title	_____
3.	Validated Date	_____; Score _____, or
4.	Applicable Supplemental Criteria: MCO P11000.5__, paragraph 2004.1, preceding. (Specify paragraph (a), (b), (c) or (d)).	
5.	Economic Analysis (See Note 4)	_____
6.	DD Form 1391	_____
7.	NAVFAC Form 11013/7	_____
8.	Site Location Map	_____
9.	Single Line Sketches	_____
10.	Pollution Control Report	_____
11.	NEPA Documentation	_____
12.	Environmental Impact Assessment Statement	_____
13.	Major Repair justified per MCO P11000.5F, chap 4, part B _____	
14.	Facilities Planning Document	_____
15.	Noncompliance letter (Class I or II)	_____
16.	Site Approval	_____
17.	ASN Approval	_____
<p>NOTES: 1. For each item above, fill in as indicated. For items 4 through 16, use checkmark for documents contained in file or N/A for Not Applicable.</p> <p>2. As a minimum, an M2 project file will contain items 6, 7, 8, 9, 12, and 13 preceding.</p>		

> Figure 2-1.--Project File Checklist.

3. As a minimum, an R2 project file will contain items 6, 7, 8, 9, 11, and 16, preceding. A PCR is required for all environmental projects.
4. Required for all projects whose cost exceeds \$2 million or is over 50 percent of the RPV and \$200,000.

Figure 2-1.--Project File Checklist--Continued.

REAL PROPERTY FACILITIES MANUAL

CHAPTER 3

CONSTRUCTION

	<u>PARAGRAPH</u>	<u>PAGE</u>
SECTION 1: DEFINITIONS		
CONSTRUCTION	3100	3-3
CONVERSION	3101	3-3
ADDITION, EXPANSION, EXTENSION	3102	3-3
REPLACEMENT	3103	3-4
ALTERATION	3104	3-4
CONSTRUCTION INCIDENT TO REPAIRS	3105	3-5
REHABILITATION, IMPROVEMENT, AND SIMILAR TERMS	3106	3-5
MINOR CONSTRUCTION PROJECT	3107	3-5
MAJOR RESTORATION OR REPLACEMENT OF DAMAGED FACILITIES . .	3108	3-6
INSTALLED EQUIPMENT	3109	3-6
SECTION 2: CONSTRUCTION PROJECTS		
INCREMENTATION	3200	3-9
CONSTRUCTION, EQUIPMENT INSTALLATION, REPAIR, AND MAINTENANCE PERFORMED AS ONE PROJECT	3201	3-10
COMBINING APPROPRIATED AND PRIVATE OR NONAPPROPRIATED FUNDS	3202	3-10
PROJECTS IN THE SAME REAL PROPERTY FACILITY	3203	3-11
RESTRICTED PROJECTS	3204	3-11
		3-1

REAL PROPERTY FACILITIES MANUAL

	<u>PARAGRAPH</u>	<u>PAGE</u>
PROJECT FILES	3205	3-12
APPROVAL AUTHORITIES AND SUBMISSION REQUIREMENTS	3206	3-12
MINOR LAND ACQUISITIONS	3207	3-12
SPECIAL CONSIDERATIONS	3208	3-13

FIGURE

3-1	MINOR CONSTRUCTION PROJECT APPROVAL AUTHORITIES	3-14
-----	--	------

3-2

REAL PROPERTY FACILITIES MANUAL

CHAPTER 3

CONSTRUCTION

SECTION 1: DEFINITIONS

3100. CONSTRUCTION. The installation or assembly of a facility; the addition, extension, alteration, conversion, or replacement of an existing facility; or the relocation of an existing facility. The term includes installed equipment as well as related site preparation, excavation, filling and landscaping, and other land improvements. Construction includes demolition facilities to be replaced, supporting utilities, roads, parking lots, and equipment installed in and made a part of such facilities. Construction projects should exclude all production and other movable equipment. Source and cost of all production and other movable equipment directly associated with construction projects should be disclosed as additional information in presenting construction programs and budgets. The provisions of this Manual also apply to noncapitalized undertakings when they constitute construction as defined. Although some expenditures for construction (normal alterations) may not enhance plant value and may be accounted for in the 41000 series of Functional Account Numbers (or in Cost Account Code 7021, see NavCompt Manual, volume 2), these undertakings must be managed, funded, and reported per the provisions of this Manual.

3101. CONVERSION. A conversion is a major structural revision of a real property facility that changes the functional purpose for which the facility was originally designed or used. A conversion results in a change to the basic real property facilities 5-digit category code (the current editions of DoD Inst. 4165.3 (NOTAL) and NAVFAC P-72) currently assigned to the facility. Two elements are necessary for conversion: (a) a major structural revision and, (b) change in functional purpose. Major structural revision consists of major work to strengthen the basic structure, such as, increasing the size of columns, girders and beams, strengthening footings, or adding new structural members. When a conversion project also includes repairs and/or maintenance, the separate categories of work may be funded as such.

3102. ADDITION EXPANSION, EXTENSION. Addition, expansion, and extension each constitute a physical increase to a real property

facility that adds to the overall external dimensions of the facility. As a general rule, if the dimensions used to record the facility in the inventory are increased, then an addition, expansion, or extension has occurred. Examples are:

1. Increasing the length or width of piers or runways or increasing the length, width, or height of buildings is an addition.
 2. Increasing the production capacity of a utility plant by the addition of a generator or increasing the storage capacity of a petroleum oil lubrication facility is an expansion.
 3. Increasing the length of a primary water distribution line is an extension.
 4. Providing additional electrical service within a building is not an addition, extension, or expansion of the electrical distribution system but is an alteration to the building or an element of "nonconstruction equipment installation expense."
- > 5. Additions or modifications to facility components or materials or the interior of a building which are required for compliance with current life safety standards or environmental regulations are classified as repair. As an example, constructing a fire escape on a building is not an addition, expansion, or extension but is classified as a repair provided the preceding criteria are met.

3103. REPLACEMENT. A replacement is a complete reconstruction of a real property facility destroyed or damaged beyond the point at which it may be economically repaired. A construction project for complete replacement must include the cost of demolition of the replaced facility, and such costs are part of the construction costs.

> 3104. ALTERATION. An alteration is the work required to adjust interior arrangements, on-base locations, or other physical characteristics of an existing real property facility so that it may be more effectively adapted to or used for its designated purpose. Alterations required for compliance with current life safety standards or environmental regulations are classified as repair. Additions, expansions, and extensions are not alterations. Examples of alterations are:

1. A real property facility may be moved or disassembled and reassembled at a different location within the confines of an activity. In other words, a structure may be relocated and considered an alteration as long as it is not removed from (demolition), nor added to (new construction), the activity's real property inventory.

2. A section of road or railroad may be relocated or realigned to reduce curves or increase clearance.

3. The fabrication, erection, installation or removal of a partition, the installation of a new door and/or a window, or the addition of a mezzanine constitutes an alteration.

4. The installation of central air-conditioning or mechanical ventilation is an alteration.

> 5. The installation of a fire protection system in an existing facility or structural modifications for fire protection purposes are alterations unless the installation or modification is required for compliance with current life safety standards.

> 3105. CONSTRUCTION INCIDENT TO REPAIRS. Construction incident to repair is that which good engineering practice dictates simultaneous accomplishment with a repair effort. Such construction may involve specific considerations of energy conservation methods and systems. The purpose of the integrated undertaking must be the restoration of the real property facility to such condition that it may be effectively used for its designed purpose. The construction is not to be funded as repair and must be separately identified in the cost estimate for proper funding. Examples of construction incident to repair are as follows:

1. Installing new insulation in exterior walls in connection with the replacement of deteriorated wallboard on their interior surfaces.

2. Providing natural light by installing skylights when replacing a deteriorated roof.

3. Extending air-conditioning ducts into spaces currently served by window units in lieu of replacing the latter, in connection with an overall building repair.

3106. REHABILITATION, IMPROVEMENT, AND SIMILAR TERMS. Work to accomplish either rehabilitation or improvement is usually a combination of repairs and/or various elements of construction as defined in paragraph 3100, preceding. Project titles should not include such terms as "rehabilitation" or "improvement."

> 3107. MINOR CONSTRUCTION PROJECT. A minor construction project is defined as a single undertaking at a military installation that includes all construction necessary to produce a complete and usable facility, or complete and usable improvement to an existing facility, and has an approved cost equal to or less than the amount specified by law. The maximum amount for a minor O&MMC project is currently \$300,000 dollars. Minor construction projects

may be subfunctional category R1 or R2 type projects. Only R2 regular projects are included in the facilities projects program, except for those special programs identified herein.

1. R1 Projects. Minor construction projects which can be accomplished within the approval authority of the activity commanding officer. (See figure 3-1.) Commanders shall not exceed their local approval authority without prior approval by the CMC (LFF).

2. R2 Projects. Minor construction projects which require approval of the CMC (LFF), plus all special program Projects. (See figure 3-1.)

> 3108. MAJOR RESTORATION OR REPLACEMENT OF DAMAGED FACILITIES. Construction projects having a funded cost above \$300,000 for the restoration or replacement of facilities damaged or destroyed by an Act of God will be accomplished per chapters 5 and 6 of MCO P11000.12.

3109. INSTALLED EQUIPMENT. Items of equipment that are attached to or an integral part of a facility.

1. Installed equipment, sometimes called "built-in equipment," is accessory equipment and furnishings that are required for operation and are affixed as a part of the real property facility. The equipment is engineered and built into the facility as an integral part of the final design and as an essential part thereof. Equipments of this category are considered part of the real property and are normally taken up under Real Property Class 2. The following items are typical examples (NavCompt Manual, paragraph 036004, provide additional guidance):

- a. Venetian blinds and shades.
- b. Elevators and escalators.
- c. Telephones (owned by Government), fire alarm, and intercommunication systems and equipment.
- d. Heating, ventilating, and air-conditioning installations.
- e. Electric generator and auxiliary gear.
- f. Hoods and vents.
- g. Refrigerators (built-in).

- h. Crane runways (built-in).
- i. Chapel pews and pulpits.
- j. Theater seats.

2. Excluded. Normally the costs of all items of equipment, including furniture and furnishings, which are loose, portable, or can be detached from the structure without tools, are excluded from the real property costs. In addition the costs of permanently attached equipment related directly to the operating function for which the structure is being provided, such as technical, scientific, production and processing equipment, and which are usually procured from other appropriations as personal property, are normally excluded from the real property costs. The following are typical examples:

- a. Loose furniture.
- b. Loose furnishings, including rugs.
- c. Filing cabinets and portable safes.
- d. Portable office machines.
- e. Plug-in wall clocks.
- f. Portable food preparation and serving equipment, including appliances.
- g. Training aids and equipment, including simulators.
- h. Shop equipment.
- i. Automatic data processing equipment.
- j. Portable photographic equipment.
- k. Any operational equipment for which installation, mounting, and connections are provided in building design and which are detachable without damage to the building or equipment.

REAL PROPERTY FACILITIES MANUAL

CHAPTER 3

CONSTRUCTION

SECTION 2: CONSTRUCTION PROJECTS

3200. INCREMENTATION

1. No project may be subdivided to reduce the cost for purposes of circumventing programming and approval requirements. Each project must result in a complete and usable real property facility or improvement thereto. The planned (i.e., foreseeable) acquisition of, or improvement to, a real property facility through a series of minor construction projects for mission change at the same activity is allowed. For example, if bedding down an aircraft at an air station requires construction of a hangar addition, parking apron, taxiway, and utilities, separate projects would be prepared for all these facilities.

2. Incrementation constraints have been modified by the Congress to permit using minor construction projects to precede or follow a major construction project. Use of the minor construction authority to construct unforeseen requirements of a MILCON project is permitted when such minor construction would provide a complete and usable facility to meet a specific need during a specific timeframe. A minor construction project may follow a MILCON project when new mission requirement develops after the military construction project has been completed. The regular MILCON project must fully satisfy all known requirements of the purpose being supported at the time of beneficial occupancy. In general, it should be expected that no general improvements would be required in such facilities for at least 2 years following beneficial occupancy unless a new mission requirement develops after beneficial occupancy, or for unrelated purposes.

3. Additional Criteria

a. A complete and usable facility includes extensions or improvements to other facility categories required to make the facility usable, such as exterior electrical, water, or sewage distribution systems, or related facilities, such as parking lots and fencing. An exception is a modification to a central utilities plant required by several facility upgrade projects. Lower command approval levels cannot be used for funding additional projects for minor construction directly related to facilities under construction.

b. For mission changes, each facility requirement can be a separate project. Each facility within the total requirement must be complete and usable.

c. A single project can be prepared for a specific improvement to an existing facility. Similar improvements in other facilities can be by separate projects. Also, unrelated and dissimilar improvements in the same facility can be in separate projects. For example, energy and dissimilar improvements in the same facility can be in separate projects. For example, energy improvements in the same facility can be in separate projects. For example, energy improvements can be separate from a fire protection requirement.

d. Following are examples of auctions that are prohibited:

(1) Splitting a project into increments solely to reduce the cost below an approval threshold or minor construction ceiling amount.

(2) Incrementation that results in a higher cost of construction because of a sacrifice of economy of scale.

(3) Concurrent work on an active MILCON project to avoid variation notification procedures.

3201. CONSTRUCTION, EQUIPMENT INSTALLATION, REPAIR, AND MAINTENANCE PERFORMED AS ONE PROJECT

1. When construction, equipment installation, repair, and/or maintenance are accomplished simultaneously as an integrated undertaking, each separately defined category of work may be approved and funded on the basis of each of the separate categories. For this purpose, engineering cost estimates may be used to determine the costs applicable to each portion.

2. In the event a project is composed of work which is so integrated as to preclude separation of construction and repair costs and the total funded cost of construction and repair exceeds \$200,300, the combined construction/repair project shall be accomplished as a MILCON project.

3202. COMBINING APPROPRIATED AND PRIVATE OR NONAPPROPRIATED FUNDS.

Appropriated funds will not be mixed with private and/or NAFs for the same single undertaking since this practice may be considered incrementation and subdivision to circumvent statutory limitations. Exceptions to this policy must be approved in advance by the Secretary of the Navy or designee. Copies of approved exceptions must be provided to the House and Senate Armed Services Committees. Private funds and/or NAFs may be used to purchase and install furnishings, equipment and interior finishes for private and/or NAF activities.

3203. PROJECTS IN THE SAME REAL PROPERTY FACILITY. Where two or more projects for minor construction are undertaken on the same real property facility within any 12-month period, the justification for the second and subsequent projects shall clearly demonstrate the projects are for purposes unrelated to the previous projects. Category codes shall not be the determinant on justifying unrelated purposes.

3204. RESTRICTED PROJECTS. The following types of projects require approval of higher authority. The titles and descriptive data shall clearly identify the restricted characteristics of project proposals involving:

1. Commercial and Industrial Type Facilities. Certain projects involving in-house operation to produce products or services which normally can be obtained from commercial sources constitute "new starts" which must receive prior approval. (See MCO 4860.3.)

2. Storage and Warehousing Facilities. Acquisitions of facilities and diversions of storage and warehouse areas must be accomplished per the current edition of MCO P4450.7.

3. Installation of Air-Conditioning. Approval is required for certain exceptions to criteria governing the installation of air-conditioning, evaporative cooling, dehumidification, and mechanical ventilation. (See the current edition of MCO P11000.9.)

4. Conversion of a Boiler Plant to Burn Another Type Fuel. A fuel conversion project for a plant in good repair is categorized as an alteration and must, therefore, be programmed as construction. Approval is required for conversions involving boiler plants with an output capacity exceeding 100,000,000 British thermal units (Btus) per hour. (See MCO P11000.9 and the current edition of DoD 4270.1-M.)

5. Religious, Welfare, and Recreational Facilities. Project proposals involving religious, welfare, and recreational activities, for which space criteria is not provided in DoD 4270.1-M, must receive prior approval of the ASN(S&L).

6. IBOP. All construction outside the United States, Puerto Rico, and U.S. possessions is subject to DoD policies and procedures intended to minimize expenditures affecting the IBOP. Such procedures, outlined in appendix E, include the use of the U.S. contractors; U.S. procured materials and end products (sand, gravel, and the like excepted); U.S. Government-furnished materials and equipment; U.S. flag, ocean, surface, and air carriers; prefabricated installations and structures manufactured in the U.S.; and competent troop labor. However, these procedures can be modified per various country-to-country agreements.

3205. PROJECT FILES. A project file, representing a complete historical record of the project from inception to completion, shall be maintained for a minimum of 3 years following completion of the project. Correspondence and other documentation, including memorandums for the record pertaining to decisions resulting from discussions, meetings, and telephone conversations, shall be included in the file. Following the retention period 7 pertinent data shall be transferred to the permanent facility history file. All project submissions should comply with the project file checklist. (See figure 2-1.) The minimum contents of the file are given in notes 2 and 3.

3206. APPROVAL AUTHORITIES AND SUBMISSION REQUIREMENTS. Approval authorities by monetary limitations shall conform to those outlined in figure 3-1. Project submission and validation requirements shall conform to the instructions contained in chapter 2.

3207. MINOR LAND ACQUISITIONS

1. Definition. As used in this Manual, the term "minor land acquisition" means the acquisition of any interest in land which can be acquired under 10 U.S.C. 2672 and is not subject to acquisition under the authority of an annual MILCON program.

2. Scope. This Manual applies to minor land acquisition in the U.S., its territories, and possessions and covers acquisitions by purchase, exchange, condemnation, and donation.

a. Real property acquisitions costing less than \$200,000 which are necessary to support construction items in annual MILCON programs are generally omitted from the MILCON program, and when so omitted, will be accomplished under 10 U.S.C. 2672 and this Manual.

b. Real property acquisitions costing less than \$200,000 which are not supporting a MILCON project, will be accomplished under 10 U.S.C. 2672.

3. Policy. Minor land acquisitions which are determined to be in the interest of national defense and may be accomplished under this Manual when:

a. Headquarters Marine Corps has approved the military requirement.

b. The property involved can be acquired at a cost of not more than \$200,000 exclusive of administrative costs and the amounts of any deficiency judgments.

c. There is no other Government real property available which can be used to adequately support the military requirement.

d. The property to be acquired will fully satisfy the requirement and does not involve the acquisition of a portion of a larger project on an incremental basis.

e. The proposed acquisition is consistent with the policies of MCOs P11000.12 and P11000.14.

4. Execution. When the criteria established in paragraph 3207.3, preceding, have been satisfied, the minor land acquisition project shall be forwarded via the CMC (LFL) to the appropriate EFD for accomplishment.

3208. SPECIAL CONSIDERATIONS

Ch-3 1. \$300,000 Dollar Minor Construction Limit. Remember this is a congressionally mandated statutory requirements (i.e., a law) and cannot be exceeded. Waivers are not available. Violations, if minor MILCON funds are not available, must be reported to Congress.

2. 6 Percent Minor Construction Limitation. The 6 percent minor construction limitation for R1 projects has been removed. However, the Marine Corps still has a 10 percent target for the total minor construction (R1/R2) program. Therefore, R1 should be maintained at reasonable levels. Otherwise reestablishment of an R1 cap may be necessary.

REAL PROPERTY FACILITIES MANUAL

Estimated Hundred Cost of Project	Approval Level	
	Cmdr	CMC
A. Major Activities		
\$100,000 or less (R1)	X	-
\$100,001 - \$300,000 (R2)	-	X
\$0 - \$200,000 (R2 special programs)	-	X
B. Minor Activities		
\$10,000 or less (R1)	X	-
\$10,001 - \$300,000 (R2)	-	X
\$0 - \$200,000 (R2 special programs)	-	X
Legend		
Cmdr - Activity Commander		
CMC - Commandant of the Marine Corps		
NOTE: Minor activities may submit regular R2 projects exceeding \$10,000 for approval and funding, if desired.		

Figure 3-1.--Minor Construction Project Approval Authorities.

REAL PROPERTY FACILITIES MANUAL

CHAPTER 4

REPAIRS

	<u>PARAGRAPH</u>	<u>PAGE</u>
SECTION 1: GENERAL INFORMATION		
DEFINITION	4100	4-3
EXAMPLES OF REPAIR	4101	4-3
GENERAL POLICY	4102	4-4
STRUCTURAL REPAIRS	4103	4-4a
REPAIRS TO UTILITY SYSTEMS	4104	4-5
PAVEMENT REPAIR	4105	4-6
MODERNIZATION OF LIGHTING SYSTEMS	4106	4-8
BACHELOR QUARTERS	4107	4-8
PROJECTS WHICH AFFECT PROPERTIES OF HISTORIC OR CULTURAL SIGNIFICANCE	4108	4-9
POLICY ON HANDICAPPED AND SEISMIC REQUIREMENTS	4109	4-11
ENVIRONMENTAL REPAIR PROJECTS	4110	4-12
SECTION 2: REPAIR PROGRAMMING		
APPROVAL AUTHORITIES AND SUBMISSION REQUIREMENTS	4200	4-13
CRITERIA FOR JUSTIFICATION AND REVIEW OF REPAIR PROJECTS	4201	4-13
REPAIR AND MAINTENANCE PERFORMED AS ONE PROJECT	4202	4-14
INCREMENTATION	4203	4-14
FIGURE		
4-1 REPAIR PROJECTS APPROVAL AUTHORITIES		4-15

REAL PROPERTY FACILITIES

CHAPTER 4

REPAIRS

SECTION 1: GENERAL INFORMATION

> 4100. DEFINITION. Repair is the restoration of a real property facility to such condition that it may be used for its designated purpose. This may be completed by overhaul, reprocessing, or replacement of constituent parts or materials that have deteriorated by action of the elements or usage to the point where they can no longer be economically maintained.

4101. EXAMPLES OF REPAIR

1. Replacement of broken piling, decking, or structural elements of a pier or wharf.
 2. Roof repair by replacement.
 3. Replacing or overlaying broken, worn, or deteriorated pavement.
 4. Replacing worn-out installed equipment (as defined in paragraph 3109, preceding) that is beyond economical maintenance.
 5. Overlaying a floor, which can no longer be sanded and refinished, with linoleum or floor tile is considered repair rather than maintenance.
 6. Demolishing an unusable facility. The demolition of a facility or a portion of a facility is repair where the facility or portion to be demolished is not to be replaced with another facility, and must be removed because the extent of deterioration precludes economical repair and restoration, and constitutes a hazard to the health and safety of personnel. Related costs, such as closing openings and cutting off utilities, are within the scope of repair. However, if demolition is part of a construction or MILCON project, then the Most of demolition is part of the construction funded project cost. For projects which affect properties of historic or cultural significance see paragraph 4108, following.
 7. The complete replacement or major reconstruction of a facility, such as the removal of a deteriorated prefabricated building and the erection of a new building on an existing foundation, is construction, not repair.
- > 8. Repairs may include modifications or additions to a building's interior or to a facilities components or materials when this work is required for compliance with current life safety standards or environmental regulations.

This encompasses a wide range of work accomplished in normal repair/upgrade to include correcting seismic deficiencies, installing fire protection, and removal of asbestos material, transformers containing PCB, and hazardous material spills.

4102. GENERAL POLICY

1. s a general guide regarding repair projects involving replacement of constituent parts, the item installed shall be equal in quality and size or capacity to the item removed.
2. Repairs can be effected by replacement of the original materials with substitute materials under the following conditions:
 - a. When a direct replacement is no longer available.
 - b. When economic and environmental justifications dictate replacement with improved or more durable or more aesthetic materials. Such justifications shall be based on sound engineering judgment that takes into account functions performed in the area and a favorable life cycle cost analysis over the remaining life of the structure. (Use NAVFAC P-442 as a guide.) Improved materials or design may be used, if new materials have been developed and have come into accepted use since installation of the material to be replaced, or if the selection of the original material or the original design has proved economically unwise. In general, if the current criteria for new construction does not specify the use of a new material of higher quality or durability for a similar purpose as originally designed, then the new material cannot be used for repair. The intent of this section is to not allow for the improvement or upgrading of an existing facility normally funded through construction with repair funds. Discretion should be used in preparing the project submission to assure that the correct intention is emphasized in the project write up.
3. In the course of repair by replacement, constituent parts of a structure, such as electrical wiring, piping, heating, and ventilating equipment (contained within the individual building), may be increased in size to meet current demands or modern accepted engineering practice. These repairs include upgrading components to meet current standards or codes.
4. When the scope of a repair project exceeds 50-percent of the replacement value of the facility and the cost exceeds \$3,000,000, the project must be approved by ASN(I&E). When calculating the replacement value, only the individual facility listed on the plant property record may be used. Projects in this category should be submitted to the CMC(LFF) along with an updated DD Form 1391 and economic analysis.

4103. STRUCTURAL REPAIRS

1. Repair by replacement of deteriorated walls, gutters, roofs, stairs, porches, platforms, windows, fascia, sills, and similar components may be accomplished through the use of improved or more durable or more aesthetic materials per the general policy.
2. Structures that are not of permanent construction shall be upgraded by exterior repair only to the extent justified by the remaining useful life and/or foreseeable requirement for the structure.
3. In the course of repair, window and door openings may be modified to the extent necessary to take advantage of available manufactured sizes so as to preclude special fabrication costs.
4. Built-up and shingle roofs may be repaired by overlays on existing material.
5. Waterproofing and/or repainting of exterior walls are not repairs but constituent maintenance.
6. Drainage ditches and culverts that need repair can be enlarged to meet current needs when repair work is undertaken. Project upgrading existing earth ditches with concrete may be either construction or repair and should be forwarded to the CMC (LFF-2) for classification.

4104. REPAIRS TO UTILITY SYSTEMS

1. Replacement of portions of a utility system (as identified in the facility property record card and not interconnected with another similar system) that have deteriorated to a point where they cannot be economically maintained shall be classified as repair.
2. In replacing constituent parts of utility systems, improvements can be made in the design of materials used provided that a life cycle cost study indicates that such improvements will result in lower maintenance or operating costs over the projected life of the system, equal to or greater than the increased cost of the improvement over replacement in kind. Typical work falling within the category of modernization incident to repair may include the following work:
 - a. Replacement of corroded pipe with pipe having a higher resistance to corrosion.
 - b. Replacement of unreliable and obsolete equipment, such as a control system needing repair, with an automatic control system that would permit more economical operations.

c. Replacement of existing pipe, conduit, or ducts needing repair with components larger than the original size when the original does not meet current needs. This does not include increases in the size of the air-conditioning units.

3. The costs involved in the modernization of utility systems related to improving the means of production or use of utilities, within existing plant scope, when such modernization is incident to repair, are chargeable as repair.

4. When modernization increases production capacity, enlarges, extends, or expands primary distribution systems, or provides service for a new purpose, the portion of the project that accomplishes the aforementioned is construction and must be processed as such.

5. Conversion of a heating plant, which is in good repair, from one fuel to another is an alteration and, therefore, must be processed as construction. However, if a heating plant is beyond economical repair, and the base commander so certifies, then a conversion may be financed as repair with operation and maintenance funds, provided the expenditure meets all restrictions on the use of these funds.

6. In the repair of piping systems that have deteriorated, cathodic protection shall be incorporated as a repair cost when economically justified.

7. The repair by replacement of equipment or systems, such as lighting, heating, or cooling equipment or systems can be classified as repair if the project:

a. Will achieve the most cost-effective energy savings over the life-cycle of the equipment or system being repaired, and

b. Will meet the same end need as the equipment or system being repaired.

4105. PAVEMENT REPAIR

1. Types of Pavement. The various pavements reported under DoD categories, such as airfield pavements (runways, taxiways, aprons, and other) and roads and streets (walks, parking areas, and miscellaneous pavements) may include the following constituent parts:

a. Surface course (including wearing surface).

b. Base course.

c. Subbase course.

d. Compacted subgrade.

e. Shoulders, a continuous drainage system, and other appurtenances (excluded are communication lines, and liquid fuel storage, and distribution).

2. Types of Pavement Deterioration. Typical types of pavement deterioration, damage, or failure that may be corrected by repair are as follows:

- a. Structural defects, such as cracks or breaks that will impair the life or the load-carrying capacity of the pavement.
- b. Surface defects, such as spelled, shattered, or broken-up rigid slabs, which may require replacement of all or a portion of any slab.
- c. Settlement of a portion of pavement where the base or subbase has failed or densified.
- d. Surface evidence of movement or distress, such as plastic movement (shoving) or distress of the base and subbase course.
- e. Rutting of pavement possibly caused by loss of stability or subsurface failure due to excess moisture.

3. Types of Pavement Repair Work. The following are typical examples of pavement work which, except for "major restoration," can properly be classified as repair. A specific repair project may include various combinations of these examples:

- a. Spot Repair. The repair or replacement of a failed or deteriorated separate area or slab by removing and replacing portions of the pavement surface, base, subbase, and appurtenances, as necessary, to maintain serviceability.
- b. Overlay. The overlayment of all or part of an existing pavement, including spot repair to the existing conditions; necessary preparation of the existing pavement surface; use of a leveling course, where required, in the overpayment; and placement and finishing the new surface. The primary purpose of overlayment shall be to achieve a smooth pavement free from cracks, spelling, and settlement rather than to increase the design strength. The repair, however, must be designed to accommodate current missions.
- c. Resurfacing. The replacement of a deteriorated, flexible-type pavement surfacing to maintain serviceability of the pavement, including removal of the existing surfacing; spot repairs of the existing base, subbase, drainage, and appurtenances, as required; leveling and compacting the base; and placement and finishing the new surface material. The primary purpose of resurfacing is to achieve a smooth pavement, free from spelling, cracks, settlement, popouts, etc., to make the pavement serviceable rather than increase the design strength. The repair, however, must be designed to accommodate current missions.

d. Restoration. The replacement of a deteriorated pavement by removal of continuous portions of the existing surface, base, subbase, drainage, and appurtenances as necessary and replacement with new components. The primary purpose of restoration is to restore the strength and serviceability of the existing pavement so it will continue its existing functional use rather than increase the design strength. The repair, however, must be designed to accommodate current missions.

4106. MODERNIZATION OF LIGHTING SYSTEMS

1. Except as restricted below, work resulting in the modernization of lighting system of a building may be funded as repair if the existing system is inadequate; i.e., does not meet the lighting intensity recommended for this particular area and is detrimental to the efficiency of work required in the building, unsafe, or harmful to employee eyesight. In this context, the correction of a deficiency of light in a lighting system is in the nature of a repair, and therefore, a determination of physical system deterioration is not essential to classify the work as repair. The project documents must include the lighting intensity as recorded and number of personnel affected. The concept includes exterior lighting on or within the 5-foot line of the building and lighting within the boundaries of a parking area. Energy conservation measures should be considered when replacing an inadequate and/or deteriorated lighting system when it will result in energy savings.

2. If the need for modernization is a direct result of a conversion or a change in functional purpose to which the structure is to be used, the work is an alteration and must be funded as construction.

4107. BACHELOR QUARTERS

1. The key to a strong Marine Corps is the retention of trained personnel. Along with the efforts to compensate Marine Corps personnel at levels enjoyed in the private sector is the need to provide well-maintained and livable housing. Many of the Marine Corps facilities are old and require extensive repairs and improvements. Others, although not as old, have deteriorated under the heavy usage that personnel living space receives. It is necessary to resolve the problem by replacing unsatisfactory facilities and by improving the condition of existing assets. Confusion has existed in the classification of work for the latter category. Generally, if the work is accomplished because of the condition of the facility, the classification of the work as repair is appropriate.

2. The following guidelines are provided for its classified as repair:
 - a. Replacing deteriorated tile flooring with carpet.
 - b. Replacing deteriorated plumbing fixtures with modern type fixtures.
 - c. Covering or replacing damaged, cracked and spalled wall surfaces with materials such as vinyl, or in high moisture areas like showers, with materials that are water resistant.
 - d. Dropped ceiling in lieu of extensive ceiling repairs.
 - e. Replacement of old deteriorated multiple heating systems with a modern efficient central system. Annual cost of repairs to keep system operational can be a contributing factor in this decision.
 - f. Replacing deteriorated windows with more energy-efficient and attractive windows.
3. Items such as dividing open bay spaces into cubicles, or rearranging locations of shower and restroom facilities, are construction items.
4. Modernization, repair, and construction plans of bachelor officers' quarters (BOQs) and bachelor enlisted quarters (BEQs) should consider the economies of other alternatives, such as using underused personnel housing of other military services, when appropriate. The programming of construction and modernization projects should be reviewed to identify and take advantage of opportunities to reduce off-base housing costs. Cost of temporary relocations during modernization and repair should not be ignored in comparing cost with the alternative of new construction.

4108. PROJECTS WHICH AFFECT PROPERTIES OF HISTORIC OR CULTURAL SIGNIFICANCE

1. Responsibility

- a. It is the responsibility of activity commanders to determine during a project's earliest planning phases whether there will be any effect on properties eligible for the National Register, to initiate consultation with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation, and to follow all prescribed guidelines and procedures.

b. The CMC (LEL) provides technical advice, inter-agency coordination, and review services to activity commanders. (See the current edition of MCO 11000.19.)

2. Procedures

a. Executive Order 11593, Section II (d), requires that the Marine Corps initiate measures and procedures to provide for the maintenance of all properties under its control which are listed on or eligible for listing on the National Register of Historic Places.

b. The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings will be applied from the earliest planning phases of all Marine Corps projects involving the rehabilitation, improvement, restoration, maintenance, and repair of such properties.

c. Section 106 of the National Historic Preservation Act (as implemented at 36 CFR 800) requires that, prior to the approval of the expenditure or any Federal funds on a project the Marine Corps will:

(1) Consider whether the project affects any district, site, building, structure, or object that is eligible for the National Register of Historic Places;

(2) Initiate consultation with the SHPO to apply criteria of effect and to negotiate mitigation measures; and

(3) Afford the Advisory, Council on Historic Preservation an opportunity to review and comment upon agreements reached in consultation with the SHPO.

d. Section 110(g) of the National Historic Preservation Act Amendments of 1980 states that the cost of preservation activities are eligible project costs. Section 208 states that identification, surveys, and evaluation carried out with respect to historic properties within project areas may be treated for purposes of any law as planning costs of the project.

3. Special Considerations. The repair of historic structures involves several considerations different from the typical Marine Corps structure. Once the decision has been made to retain the structure from a historical standpoint, economics is not always the most significant factor. In fact, it is possible that the facility on historical grounds, will require a large expenditure of funds. The evaluation of repairs required, structural quality, and replacement

and replacement generally requires specialized knowledge of historical structures in relation to the value of the structure. For highly significant historical structures, consideration may be given to restoring the item to its original condition or equivalent; i.e., replace moldings with same as of the period of original construction. The project writeup for work accomplished on any historical structure should clearly state that it is a historical structure. The designation should be included in the project title. The following guidance is provided to distinguish between the classification concerning repair and construction:

a. Repair

(1) Replacement of damaged baseboard, molding, etc., with items similar to those originally provided for the structure.

(2) Replacement of a deteriorated heating system with a modern system.

(3) Demolition of add-on structures - no longer usable or reparable.

b. Construction

(1) Adding components eliminated in previous years such as interior partitions, doors, windows, chair rails, etc.

(2) Adding central air-conditioning or humidifiers when no central system exists or when existing air-conditioning is provided by window units.

(3) Providing items enhancing the viewing of the structure or bringing to conformance with existing code, such as indirect lighting floodlights, handicapped ramps, modernize electrical or heat ventilation air-conditioning (HVAC) systems, etc.

4109. POLICY ON HANDICAPPED AND SEISMIC REQUIREMENTS

1. The CMC policy as it pertains to seismic evaluation and handicap requirements is provided below:

a. Handicap Requirements

(1) If nonhandicap related repairs are planned, and it can be considered the logical extension of the planned repairs to include required handicap modification, the handicap modifications can be included as repair. Otherwise, handicap requirements standing alone constitute construction.

(2) Guidance in chapter 18 of Construction Criteria Manual, DoD 4270.1-M, applies to what and where handicap requirements should be provided.

b. Seismic Requirements

> (1) Bringing a structure to the state-of-the-art for seismic standards can be included in a major repair project, if seismic repair is structural in nature. Further, the seismic repairs should be reasonably considered as the logical extension of the nonseismic repairs except where the repair is required for compliance with current life safety standards.

> (2) Modifications or additions to a facility to correct seismic deficiencies are classified as repair when the work is required for compliance with current life safety standards.

> (3) The guidance in NAVFAC Instruction 11012.145 applies. A phased and orderly plan should be developed for providing the necessary seismic requirements, working from greatest to lowest risk. A phased and orderly plan precludes the requirement for supplemental projects. This plan or study should be developed using local P funds.

(4) If local P funds are not available, a request should be sent to the CMC (LFF) asking for funds on a one-time basis. Thereafter, appropriate P funds should be planned and budgeted for locally.

(5) When supported by a seismic study, individual projects (either major repair or minor construction) should be developed or expanded to include the appropriate seismic features.

> 4110. ENVIRONMENTAL REPAIR PROJECTS

1. Repair projects, in which the majority of work to be accomplished is environmentally related, will be identified separately from normal repair projects. The activity will evaluate and classify each of these separate projects with an EPA category of Classes I, II, or III per MCO P5090.2. This classification will be annotated on the DD Form 1391 in Block 10, Description of Proposed Work. Typical projects which are included in this category are:

a. Repair and replacement of sewer lines which are part of a larger utility system.

b. Repair, removal, or replacement of underground storage tanks.

c. Replacement of PCB transformers.

2. Categorizing a repair project as environmentally related does not alter the limitations and guidelines previously set forth in this Manual for normal repair projects.

3. Modifications or additions to the interior of a building or of a facility's components or materials may be classified as an environmentally related repair project if these modifications or additions are required for compliance with current environmental regulations. These types of repairs do not include additions, expansions, alterations, or modifications which are required solely in preparation for a future change in purpose, mission, or future construction requirements.

4. If the need for environmental modifications or additions is a direct result of a conversion or change in functional purpose to which the structure is to be used, the work is classified as construction and must be funded as construction and must be funded as such.

4-12a
Ch 4

REAL PROPERTY FACILITIES MANUAL

CHAPTER 4

REPAIRS

SECTION 2: REPAIR PROGRAMMING

4200. APPROVAL AUTHORITIES AND SUBMISSION REQUIREMENTS. The approval authorities and dollar limitations applicable to funded costs of repair projects shall conform to those outlined in figure 4-1.

4201. CRITERIA FOR JUSTIFICATION AND REVIEW OF REPAIR PROJECTS

1. Justifications should demonstrate that:

a. The facility has a continuing military requirement that is documented in the shore facilities planning system.

b. The function of the facility cannot be eliminated, consolidated, or transferred to another facility.

c. The function cannot feasibly be accomplished by private industry or by cross-servicing with other Government agencies.

d. The loading factor will not permit consolidation within a like facility.

e. The proposed repairs will reduce maintenance and operating costs.

f. Deferment will result in hazards to life or property, costly production delays, impairment of operations, or eventual higher repair costs.

g. The repair costs can be amortized, if replacement of the facility is planned.

h. The method of accomplishment is considered to be the most economical and feasible under the circumstances.

i. Repair projects in which the estimated costs both exceed \$200,000 and are more than 50 percent of the replacement cost of a complete facility shall include an economic evaluation proving that repairs are more economical than replacement.

2. Each repair or nonrecurring maintenance project submitted is subject to on-site reviews by representatives of the Office of the Secretary of Defense, congressional authorities, the General Accounting Office (GAO), or Navy area audit teams. To ensure the technical and economic validity of the project

and the need for its funding, each project must meet the criteria contained in this section. Specific data regarding potential cost savings shall be supplied in each project writeup.

3. Each repair project involving commercial and industrial type facilities must state that it has been reviewed per the latest DoD "new start" criteria (MCO 4860.3 refers).

4202. REPAIR AND MAINTENANCE PERFORMED AS ONE PROJECT. Repair and maintenance may be accomplished simultaneously as an integrated undertaking. Note, however, the funding limitations of figure 4-1.

4203. INCREMENTATION

1. Each project submitted by an activity must result in a complete and usable facility.

2. Repair projects shall not be subdivided solely for the purpose of reducing the cost to avoid approval by higher authority.

3. The above does not preclude accomplishment of portions of larger projects in more than one fiscal year. To distinguish from incrementation, it is recommended that the portions of large projects be referred to as "phases." If the total cost of all phases exceeds \$3,000,000, the repair project must be submitted for ASN(S&L) approval.

REAL PROPERTY FACILITIES MANUAL

Estimated Funded Cost of Project	Approval Level		
	Cmdr	CMC	ASN
A. Major Activities			
\$300,000 or less	X		
\$300,001 - \$3,000,000		X	
Over \$3,000,000			X
B. Minor Activities			
\$25,000 or less	X		
\$25,001 - \$3,000,000		X	
C. Major and Minoer Activities			
Estimated funded project cost of each facility exceeds both \$200,000 and percent of the replacement value of the facility (includes restoration of facilities damaged by an Act of God.)			X
Legend			
Cmdr - Activity Commander			
CMC - Commandant of the Marine Corps			
ASN - Assistant Secretary of the Navy (Shipbuilding and Logistic)			

Figure 4-1.--Repair Projects Approval Authorities.

REAL PROPERTY FACILITIES MANUAL

CHAPTER 5

MAINTENANCE

	<u>PARAGRAPH</u>	<u>PAGE</u>
MAINTENANCE	5000	5-3
DIFFERENTIATION BETWEEN MAINTENANCE AND REPAIR	5001	5-3
PREVENTIVE MAINTENANCE	5002	5-3
TYPES OF MAINTENANCE	5003	5-3
PROGRAMMING	5004	5-4
CATHODIC PROTECTION	5005	5-5

REAL PROPERTY FACILITIES MANUAL

CHAPTER 5

MAINTENANCE

5000. MAINTENANCE. The recurring day-to-day, periodic, or scheduled work required to preserve real property in such a condition that it may be used for its designated purpose. The term includes work undertaken to prevent damage to a facility that otherwise would be more costly to restore. (See MCO P11000.7.)

5001. DIFFERENTIATION BETWEEN MAINTENANCE AND REPAIR. A clear line of demarcation cannot always be drawn between maintenance and repair. Judgment must be exercised in differentiating between these categories of work. As a general rule, maintenance differs from repair because maintenance does not involve the replacement of constituent parts of a facility, but constitutes the work done on such constituent parts to prevent or correct wear and tear and thereby forestall replacement.

5002. PREVENTIVE MAINTENANCE. The correction of incipient failure before they develop into major defects requiring costly correction.

5003. TYPES OF MAINTENANCE. There are two broad types of maintenance effort. One is work performed on a facility or group of similar facilities on a continual basis with no definite beginning or end to the effort. Various terms have been used to describe these efforts, such as recurring maintenance, nonrecurring maintenance, and cyclical maintenance. Because, by definition, all maintenance is recurring, these terms do not serve to differentiate between these types. One type readily lends itself to the program covering "projects," whereas the other does not. The following terms are used herein in the interest of uniformity:

1. Specific Maintenance is preventive maintenance of a facility generally performed on a specific job order. This work recurs over a given cycle but is not of a continuing nature of the particular facility. Examples of this type of maintenance are:

- a. Exterior and interior painting of buildings.
- b. Seal-coating asphalt pavement.
- c. Resealing joints in concrete pavements.
- d. Dredging to a projected depth (2 years or longer between requirements).

2. Continual Maintenance is preventive or recurring work to maintain the facility in operable condition. This work is highly repetitive on a portion of a facility and extends throughout the year or seasonal portion of the year. Examples of this type of maintenance are:

- a. Railroad track maintenance.
- b. Pier maintenance (usually involving several piers).
- c. Stream distribution line maintenance.
- d. Preventive maintenance on electrical and mechanical equipment.

5004. PROGRAMMING

1. Policy

- a. Maintenance shall be financed from appropriations available for operations and maintenance.
- b. Specific maintenance may be programmed on a project basis per this Manual and MCO P11000.7.
- c. Continual maintenance shall be programmed on the budget basis. Approval of a budget request shall constitute authority to issue job orders or institute contract procedures. Minor repairs incident to continual maintenance, such as occasional tie replacement in railroad trackage, need not be classified separately but may be included in the maintenance job order or contract. It must be recognized that, at times, specific maintenance must also be done on the facility undergoing continual maintenance and in such case may be subject to project programming.

2. Discussion

- a. In view of the limited appropriations for maintenance and operations and the continuing increase in the plant value of facilities, greater emphasis must be placed on early detection of deficiencies and prompt remedial action to prevent larger and more costly repairs or deterioration and damage that may ultimately result in replacement. Accordingly, maximum use of local maintenance funds shall be made for this purpose.
- b. As a general rule, real property facilities that are not required to satisfy the approved facilities support requirement (FSR) shall not be maintained and should be disposed of as excess to the needs of the activity.

c. Real property facilities scheduled for replacement in the MILCON programs shall be maintained only to the degree necessary to meet the projected need for the facilities pending implementation and completion of the replacement facilities. Upon replacement, facilities should be declared excess and demolished.

d. Submission of maintenance work as a special project request shall be the exception rather than the rule. Only in highly unusual cases should a special project request for maintenance be forwarded for project funding. Such maintenance projects shall be submitted only under one or more of the following circumstances:

(1) The project proposes major maintenance work (specific maintenance) that is beyond the resources normally provided for recurring work (continual maintenances).

(2) The work must be accomplished as a single undertaking and completed as rapidly as possible to retain the facility in operational status with minimum delay. This type of work normally lends itself to contract accomplishment rather than to station labor.

(3) When the use of activity facilities maintenance forces will cause a significant adverse impact on accomplishing the balanced annual facilities maintenance work plan. Justification of such impact shall be provided with the project.

5005. CATHODIC PROTECTION

1. The installation of cathodic protection incident to the repair of a real property facility shall be processed as part of the repair project if proven to be economical.

2. The installation of cathodic protection on an existing real property facility to prevent damage to that facility shall be processed as maintenance, provided the requirement for cathodic protection developed after the facility had been placed in service, and is proven to be economical.

3. The installation of cathodic protection during the construction of a new real property facility, or during the conversion, addition, expansion, or complete replacement of a real property facility shall be processed as construction.

REAL PROPERTY FACILITIES MANUAL

CHAPTER 6

EQUIPMENT INSTALLATION

	<u>PARAGRAPH</u>	<u>PAGE</u>
INSTALLATION OF EQUIPMENT	6000	6-3
INSTALLED EQUIPMENT	6001	6-3
PERSONAL PROPERTY	6002	6-3
PROCUREMENT AND INSTALLATION OF INSTALLED EQUIPMENT	6003	6-3
PROCUREMENT AND INSTALLATION OF PERSONAL PROPERTY	6004	6-3
SUMMARY	6005	6-5
TELEPHONE EQUIPMENT	6006	6-5
BASE ELECTRONICS EQUIPMENT INSTALLATION	6007	6-7
PROJECTS FOR OPERATIONAL COMMUNICATION SYSTEMS	6008	6-7
EXAMPLES OF EQUIPMENT (PERSONAL PROPERTY) INSTALLATIONS	6009	6-9
INSTALLATION OF TECHNICAL OR SPECIAL EQUIPMENT PECULIAR TO AIRCRAFT OPERATION	6010	6-12
PROGRAMMING POLICY	6011	6-12
COST ESTIMATES	6012	6-12
JUSTIFICATION CRITERIA FOR EQUIPMENT INSTALLATION PROJECTS	6013	6-12
APPROVAL AUTHORITY AND SUBMISSION REQUIREMENTS	6014	6-13

REAL PROPERTY FACILITIES MANUAL

CHAPTER 6

EQUIPMENT INSTALLATION

6000. INSTALLATION OF EQUIPMENT. Installation of equipment consists of those modifications to a real property facility that are required solely for the operation of the "personal property." This chapter sets forth the conditions for construction and non-construction costs related to the installation of equipment.

6001. INSTALLED EQUIPMENT. Installed equipment is defined in paragraph 3109, preceding. Equipment installed and made a part of a real property facility is considered a construction cost.

6002. PERSONAL PROPERTY. Personal property is accessory equipment and furnishings that are movable in nature and not affixed as an integral part of the real property facility. This equipment includes all types of production, processing, technical, training, servicing, and RDT&E equipment, such as heat-treating ovens, machine tools, landing aids, meteorological equipment, training devices, communications equipment, automated data processing, shore electronic, and ancillary equipment.

6003. PROCUREMENT AND INSTALLATION OF INSTALLED EQUIPMENT. The initial costs of procurement and installation of installed equipment are defined as construction costs and shall be included in the cost of the construction project.

6004. PROCUREMENT AND INSTALLATION OF PERSONAL PROPERTY

1. Procurement of Personal Property. The costs associated with procurement, including transportation, unpacking, assembly, and testing of personal property, are not construction costs.

2. New Real Property. Construction of new real property facilities (including conversions, additions, expansions, and extensions) shall be complete and the facility ready to receive the personal property. All known utilities, false floors, foundations, partitions, shieldings, and other such requirements related to the installation of the equipment shall be included as a construction cost.

3. Existing Real Property. When the following types of work are directly related to the installation of personal property in an existing facility,

the work shall not be treated as construction but as an expense cost. Procurement of the ancillary equipment mentioned below is subject to the expense/investment criteria for equipment contained in the NavCompt Manual, paragraph 074060.

- a. Installation and relocation of prefabricated interior screens, partitions, and dividers that are primarily unattached; movable screens or detachable panels temporarily held in place by light braces and screws readily removable without impairing or defacing either the panels themselves or the floors, walls, or ceilings of the structure.
- b. False floors and platforms required solely for operation of equipment to be installed.
- c. Installation of required shielding for electromagnetic radiating devices. Structural modifications including new permanent partitions incident to the installation of shielding or construction.
- d. The temporary removal and reinstallation of portions of existing walls, roofs, utility systems, and appurtenances to permit installation of equipment. Reinstallation may involve rerouting or relocation of various utility systems and appurtenances.
- e. Special foundations, pads, slab-on-grade, and pits in existing facilities. Installations on floors other than slab-on-grade are limited to bases required to spread load, and/or secure equipment in place. An increase in the existing load-bearing capacity of such a floor by additional or larger structural components is construction.
- f. Secondary utility work necessary to connect the equipment to existing utility services within the facility. This work lies between the utility primary entry, or source, within the structure and the equipment to be served, for example, from the existing main electrical service panel to the equipment to be served, or for equipment requiring dedicated voltage, from the building primary bus to the equipment. Secondary utility work may include special electric panels, converters, rectifiers, step down or step up transformers, isolation of shielded spaces, or other accessory devices or special lines used exclusively for control and operation of the equipment.
- g. Installation of air-conditioning under the following circumstances:
 - (1) For types of equipment where the manufacturer of the equipment specifically states that the equipment must be operated in an air-conditioned space.

(2) For prefabricated clean rooms installed in nonair-conditioned spaces or when the building central system cannot meet the temperature and humidity requirements of the clean room operation.

(3) For operator comfort when the equipment to be installed will increase the temperature or humidity beyond reasonable comfort levels in the immediate area of such equipment. Under this policy, air-conditioning may be provided only in bonafide equipment spaces related to the equipments. Projects that include air-conditioning of associated administrative or other working spaces or personnel living spaces concurrently with air-conditioning of equipment spaces shall be programmed and financed as construction. This policy shall not be used to justify piecemeal installation of air-conditioning. Whenever possible, air-conditioning provided under this policy shall be an extension or expansion of a central plant systems which may include the extension of duct work, the extension of direct expansion systems, or the extension of chilled water systems by installation of new water lines and new air handling units. All air-conditioning accomplished under this policy shall be per the design criteria established in DoD 4270.1-M and MCO P11000.9.

(4) Mechanical ventilation and separate exhaust systems that may be provided when required for personnel safety or for the proper functioning of the equipment as required by the manufacturer.

(5) No-break power units, which are not designed or used as a primary or alternate electrical generating source for a facility, but which are used solely as integral parts of the electronic equipment requiring this type of service.

6005. SUMMARY. The regulations permitting various elements of work to be performed, in conjunction with the installation of equipment, are based upon the need generated by the particular equipment. This need is distinguished from that derived from requirements to accomplish a process or function within a specific facility. The intent is to permit the work that is normal to the installation of the new or relocated equipment to be accomplished as an integrated undertaking. The intent is not to permit accomplishment of alterations under one guise of equipment installation.

6006. TELEPHONE EQUIPMENT

1. Instruments

a. Telephone instruments and key systems are normally procured as personal property. The cables, terminals, and station wiring are considered an expense

b. Installation of the telephone equipment, not involving structural work, that is to be performed by separate contract or by station forces is chargeable to operation and maintenance funds. Installations involving structural work are categorized as construction.

c. The day-to-day equipment replacements, minor equipment rearrangements and installations within the purview of the commanding officer of an activity, and which consequently, do not require approval of higher authority are normally funded from local operation and maintenance allotments.

2. Examine Corps Telephone Facilities

a. Marine Corps-owned outside telephone distribution facilities from the building terminals to the telephone central office (exchange) are considered to be a utility system and accordingly, acquisition and installation shall be processed as construction. Existing telephone cable repair shall be funded from an operational account per NavComp Manual, volume 2.

b. Telephone cable carrier equipment (e.g., pulse code module systems) to be installed to increase the distribution system circuit to provide service to a new facility shall be included in the project for the new facility.

c. Telephone cable carrier equipment to be installed to upgrade existing systems and serve existing facilities shall be procured and installed as personal property per paragraph 6006.1,

d. Telephone cable pressurization equipment for continuous dry air pressure installed in the telephone central office (exchange) for pressurizing existing cables shall be procured and installed as personal property per paragraph 6006.1, preceding. Conditioning of existing cables for pressurization is considered maintenance and shall be processed accordingly. Pressurization equipment and the conditioning or new cable installations shall be procured and installed as part of the project for the new cable installation.

3. Telephone Central Office (Exchange) Equipment

a. Telephone central office equipment is installed equipment. Installation is part of the construction cost when it is procured and installed for a new or enlarged telephone central office which is being provided through new construction, or through conversion or addition to the existing facility.

b. The cost of relocating telephone equipment from an existing central office to a new or enlarge facility is excluded from the construction project. The equipment relocation costs will be funded by the activity.

c. The acquisition and installation of central office equipment in existing facilities shall be done per paragraph 6006.1, preceding.

d. The provisions of paragraph 6004.1, preceding apply to the air-conditioning of telephone equipment spaces in an existing facility. Air-conditioning for new or enlarged facilities shall be included in the construction projects.

6007. BASE ELECTRONICS EQUIPMENT INSTALLATION. Projects for the installation of base electronics equipment (regardless of content) are subject to all the rules and policy expressed in this Manual regarding installation of personal property. Particular attention must be given to the identification of construction and nonconstruction costs to avoid violations of the minor construction authority. However, electronics equipment installation projects do differ in the following aspects:

1. Base electronic equipment installation projects are under the purview of the CMC (CC) and are usually planned, programmed, and budgeted from the Headquarters level.
2. Installation is directed from Headquarters Marine Corps per Marine Corps-wide priorities and consideration of equipment procurement schedules.
3. Engineering is usually accomplished by the EFD. The field activity is responsible to coordinate with the appropriate agencies or DoD departments with regard to any facilities "construction or alteration" implications of electronics equipment installation projects.

6008 PROJECTS FOR OPERATIONAL COMMUNICATION SYSTEMS. The information provided in this paragraph applies safely to equipment installation for communication systems because of their programming process.

1. The following communication systems costs are considered to be construction costs under all circumstances, and shall be budgeted under appropriations available for military construction (MILCON or O&M appropriations):

a. Facilities for administration, logistics, housing, and other support-type activities required to support a communication system.

b. All other masonry buildings.

c. All paved roads and walks; and other access roads and walks not directly related to contractor requirements.

d. Common use temporary and/or permanent utilities required for the support of a communications site.

2. The following costs are direct equipment procurement and installation costs and shall be budgeted under procurement appropriations:

a. Procurement, installation, test, and checkout of communications equipment and associated gear, including antennas and antenna towers.

b. Procurement and erection of equipment shelters used solely for shelters.

3. When the following items, which might normally be categorized as MILCON are incidental but integral to the procurement and installation of communications systems and have no other purpose, costs for such items shall also be budgeted under procurement appropriations:

a. Foundations for equipment, self-contained equipment shelters, prefabricated buildings used solely for equipment shelters, antennas, and antenna towers.

b. Temporary and/or permanent utilities required solely for the operation of communications equipment.

c. Unpaved access roads and walks necessary for contractor access to areas for installation or erection of equipment.

d. Procurement and installation of security fencing necessary for protection of areas or equipment during contractor operations.

e. Engineering and design costs associated with the above items.

6009. EXAMPLES OF EQUIPMENT (PERSONAL PROPERTY) INSTALLATIONS. The following examples are provided for guidance in classifying the scope of work for projects:

1. A requirement develops for installing new test equipment and rearranging existing equipment in an avionics shop in an aircraft maintenance hangar.

a. The following elements of work are construction costs:

(1) Enlarging or providing a new transformer substation outside the hangar.

(2) Rearrangement or removal of partitions for installation of new toilet facilities or administrative office spaces.

(3) New primary electric service to the hangar.

b. The following elements are nonconstruction costs:

(1) Installation of 440 Volt (V), 200 ampere receptacles at avionics test position.

(2) Removal of shop equipment and workbenches from an existing location and reinstallation at a new location.

(3) Relocation of prefabricated detachable partitions used as shop enclosures.

(4) Additional ancillary transformer within the hangar, to develop 440 V, 200 ampere service to test position. (See paragraph 6004.3f, preceding.)

2. A requirement develops for installation of automated data processing (ADP) equipment in a supply building.

a. The following elements of work are construction costs:

(1) Enlarging or providing a new transformer substation outside the building and the provision of a main service panel in the building.

(2) Installation of permanent partitions for ADP office or other function.

(3) Additional or new primary electric service to the building.

(4) Additional fixtures for general lighting of the ADP space.

(5) Installation of security protection to windows and doors.

b. The following elements of work are nonconstruction costs:

(1) Temporary removal and reinstallation of portions of existing walls, roofs, utility systems, and appurtenances to permit ADF installations.

(2) Installation of ancillary air-conditioning for ADP environmental control. The procurement of the air-conditioning units, if they meet the cost criteria of an investment item, shall be budgeted under a procurement appropriation.

(3) Special foundations or pads in existing building for ADP equipment.

(4) False floor for ADP equipment and for secondary electrical service.

(5) Electrical service from main electrical service panel to ADP equipment within the building.

(6) Installation of required shielding on existing partitions.

(7) Installation of CO2 fire protection systems for protection of the equipment and not the facility.

3. A requirement develops to enlarge the hazardous test area within a shop of a depot maintenance activity.

a. The following elements of work are construction costs:

(1) Removal of permanent partitions and construction of new permanent partitions.

(2) Suspended ceiling.

(3) New lighting for the additional test area to satisfy a new function.

b. The following elements of work are nonconstruction costs:

(1) Special foundation for testing machine.

(2) Provision of electric service to machine.

(3) Lead-lined shield around radiograph machine.

4. A requirement develops to improve the environmental conditions in a building used for paint stripping and to provide minimum process requirements for the function on a year-round basis. The work involves installation of a complete and new heating and ventilating system for the entire building. All of the work is construction.

5. A requirement develops for the provision of additional Marine Corps-owned telephone service.

a. To an existing facility:

(1) The following elements are construction costs:

(a) Acquisition and installation of additional cable pairs from main exchange to existing facility.

(b) Acquisition and installation of additional cable pairs to main telephone exchange.

(2) The following elements are nonconstruction costs:

(a) Procurement and installation of switching equipment in main exchange.

(b) Procurement and installation of terminal equipment in existing facility.

(c) Procurement and installation of wiring, switch boxes, and instruments in existing facility.

b. To a new facility:

(1) The following elements are construction costs:

(a) Acquisition and installation of additional cable pairs from main exchange to new facility.

(b) Acquisition and installation of additional cable pairs to main telephone exchange.

(c) Acquisition and installation of terminal equipment, wiring, and switch boxes built into the new facility.

(2) The following element is a nonconstruction cost:
Procurement and installation of telephone instruments.

6010. INSTALLATION OF TECHNICAL OR SPECIAL EQUIPMENT PECULIAR TO AIRCRAFT OPERATION

1. Responsibilities. Procurement and installation of special equipment in support of aircraft operations are generally the responsibilities of commands external to the Marine Corps, such as the Naval Air Systems Command and the Naval Electronics Systems Command. For further guidance on funding responsibilities involving these external commands, see MCO P7100.8.

2. Submission. Projects to install equipment provided by external commands will be submitted to the appropriate command via the EFD and the CHIC (LFF). In cases where funding responsibility, especially in the area of associated construction, is not clearly defined, these projects will be referred to the CMC (LFF) for resolution. For further guidance on submission for funding of projects by external commands, see the current edition of OPNAVINST 11010.20. For projects in which the associated construction is less than \$15,000, funding of this construction is the responsibility of the activity commander. The CMC will not fund construction costing less than \$15,000, unless specifically requested to do so.

6011. PRO&RAMMING POLICY. The equipment installation (excluding the personal property) shall be funded as an "expenses from appropriations available for O&M, or from procurement, as appropriate. Equipment installation costs in "turn-key" projects, in existing facilities, shall be funded as part of procurement cost when a single contractor is providing for the equipment and installation in a single contracts.

6012. COST ESTIMATES. Cost estimates For each equipment installation project, where applicable, shall be shown under separate headings, precisely based upon the separate categories of work; i.e., maintenance/repair, construction, and equipment (personal property) installation. Some typical equipment costs are described in paragraph 6009, preceding.

6013. JUSTIFICATION CRITERIA FOR EQUIPMENT INSTALLATION PROJECTS. The requesting activity commander shall certify that projects for installation of equipment meet the following criteria:

1. The function to be performed by the equipment must be supported by a firm military requirement.
2. The function cannot be eliminated, consolidated, or transferred to another facility or activity.

3. The proposed project is the most feasible of the possible alternatives which would satisfy the requirement.
4. The proposed project is consistent with the characteristics and the remaining economic life of the structure.
5. The proposed project will provide a complete and usable installation. Submitting a project which is an increment of the total work foreseen to be necessary to completely install the equipment is prohibited.)

6014. APPROVAL AUTHORITY AND SUBMISSION REQUIREMENTS

1. Approval Authority. The approval authority of activity commanders for projects involving equipment installation shall be the same as for minor construction. (See figure 3-1.) The approval authorities for construction and repair projects in support of equipment installation shall be as prescribed in chapters 3 and 4 of this Manual.
2. Submission Requirements. Submission requirements for projects shall conform to those for construction and repair, as outlined in chapter 2 of this Manual. (See also chapter 5 of MCO P7100.8.)

APPENDIX A
DD FORM 1391

A-1

REAL PROPERTY FACILITIES MANUAL

REAL PROPERTY FACILITIES MANUAL

1. COMPOUND		2. DATE									
FY 19 ____ MILITARY CONSTRUCTION PROJECT DATA											
3. INSTALLATION AND LOCATION											
4. PROJECT TITLE		5. PROJECT NUMBER									
DD FORM 1391c 1 DEC 74 101-100-11-001-001				PREVIOUS EDITIONS MAY BE USED INTERNALLY UNTIL EXHAUSTED				PAGE NO.			
U.S. GOVERNMENT PRINTING OFFICE: 1978-703-733-34312											

Instructions for Preparing DD Form 1391

1. General Information

a. DD Form 1391 shall be completed for all repair, minor construction, and equipment installation projects requiring submittal, approval, and/or funding by the CMC or another command.

b. The preparation instructions contained in paragraph 2, following, are to be used for Marine Corps major repair, minor construction, and equipment installation projects funded from O&MMC appropriation only.

2. Preparation. An original and one copy of DD Form 1391 shall be completed per the following instructions:

a. Block 1. N/A.

b. Blocks 2 and 3. Self-explanatory.

c. Block 4, Project Title. Enter the appropriate project title. Building numbers should always be included in the project title if one has been assigned and where practicable. The use of common abbreviations, such as Bldg (building), EM (enlisted men), RW (runway), BKS (barracks), etc., is encouraged. Since the words "rehabilitation" and "renovation" can easily include both minor construction and repair, they should not be used in project titles.

d. Block 5, Program Element. Leave blank.

e. Block 6, Category Code. Enter the appropriate five-digit category code number as contained in NAVFAC P-72.

f. Block 7, Project Number. The Headquarters Marine Corps project identification number; e.g., LE806M. See paragraph 2002.4.

g. Block 8, Project Cost (\$000). Enter the total project cost. This cost should be identical to the total funded cost listed on form NAVFAC 11013/7.

h. Block 9, Cost Estimates. Enter the funded and unfunded projects costs. These costs should be identical to the funded and unfunded costs estimates from NAVFAC 11013/7. When design/PP&S costs are not accomplished "in-house" by station forces, the design/PP&S costs shall be listed separately.

i. Block 10, Description of Proposed Construction

(1) General Information In general, the data in this block should clearly indicate and describe the work to be done.

REAL PROPERTY FACILITIES MANUAL

Concise statements completely outlining the principle features of the work involved should be used, such as "Excavate and remove existing deteriorated section of 8-inch water main between buildings 'X' and 'Y' (approximately 400 linear feet and replace with new water main to include cutting and patching of asphaltic concrete street 20 feet wide."

(2) Requirement for Project. Much of the success of a project depends on the justification of the requirements. The format shall contain the following entries:

(a) Projects. Provide a one-sentence statement of the purpose of requesting the project. This statement should answer the question: "What does this project provide?"

(b) Requirement. Answer the question: "Why does the Marine Corps require this project?" The fact presented here must clearly show that the military requirement for the project is essential to efficiently support current and future operations set forth in the latest mission. Evidence should be submitted to indicate that the proposed minor construction project is within the approval requirement as shown on an up-to-date Base Facilities Requirements List (Form NAVMC 10915).

(c) Current Situation. Describe how it is being done now and under what conditions. This statement should support the stated requirements.

(d) Impact If Not Provided. Describe in what way the successful accomplishment of the mission would be affected or what deleterious effort would result if the project were not approved.

(e) Related Project. Enter the number and title of any or all projects which are in any way related to this project.

(f) Additional Information. Normally, the space allocated on DD Form 1391 should be sufficient to provide the information required. However, if additional space is necessary to provide such information, a continuation sheet should be provided for this purpose (see page A-2).

1 This space is to be used where it is desired to insert pertinent information which does not appropriately belong under one of the aforementioned headings. Do not mention savings unless a primary economic analysis has been prepared to support the project and is included in the facility study. In these cases, provide the statement: "The estimated benefits to be derived from this project during its economic life equate to a payback period of _____ years."

REAL PROPERTY FACILITIES MANUAL

2 Certification that the environmental impact of the project has been assessed per MCO P11000.8 may be included here.

3 Information regarding IBOP as outlined in appendix F may also be included here.

4 Photographic illustrations of existing conditions are encouraged.

REAL PROPERTY FACILITIES MANUAL

Instructions For Preparing Form NAVFAC 11013/7

1. General Information. Cost estimates of projects to be supported by more than one fund source shall show itemized cost items supported by each fund source.

2. Preparation. An original and one copy shall be prepared per the following instructions:

a. Heading Blocks. Record the following:

(1) Project Number. The Headquarters Marine Corps project identification number; e.g., LE806M. (See chapter 2.)

(2) Category Code Number. Navy code (five digits) for classifying real property. (See NAVFAC P-72.)

(3) Project Title. Specific and clearly descriptive title, beginning with the type of project (e.g., repair, conversion, alternation, or extension) and ending with the type of facility designation (e.g., alteration to barracks number 34).

b. Other Heading Blocks. Self-explanatory.

c. Columnar Headings. Funded and unfunded costs, as defined in this Manual (see chapters 3 and 4), for minor construction and repair shall be grouped and identified separately, as follows:

(1) Column 1, Item Description. Break project into standard components. When applicable, include such units of work as excavation; concrete work, such as footings, slabs, structural, etc.; masonry, structural steel; rafters and trusses; roof sheathing; roofing; windows; doors; interior floors, such as asphalt and ceramic tile, plaster, plasterboard, etc.; exterior and interior painting; electrical wiring, fixtures, outlets, and switches; plumbing on a rough and fixture basis; heating, furnaces and ducts, piping and radiators, and special equipment; removal of existing structural item; and installation of cabinets and shelving. For those items or components of work where one or two words fail to completely define the item, the description should be expanded so that the cost estimate can be evaluated and confirmed. (For example, "door interior" should be further identified as to size, thickness, type, and material.)

(2) Quantities

(a) Column 2, Number of Units. Quantities of work units or components of items listed in column 1, consistent with sound engineering practice.

REAL PROPERTY FACILITIES MANUAL

(b) Column 3, Unit. Standard abbreviations for units of measure for the project component; e.g., earthwork; CY (cubic yards); seeding, SY (square yards); pipe, LF (linear feet); ballast, TN (ton); and catch basins, EA (each). For lump sum, enter "LS".

(3) Material Cost

(a) Column 4, Unit Cost. Record the cost of the materials needed to accomplish the associated item description.

(b) Column 5, Total Cost. The result derived by multiplying this unit shown in column 4 times the number of units in column 2.

(4) Labor Costs

(a) Column 6, Unit Cost. The cost based on record experience or engineering estimate of manpower (activity labor forces and activity operators of equipment).

(b) Column 7, Total Cost. The result derived by multiplying the unit shown in 6 times the number of units in column 2.

(5) Engineering Estimates

(a) Column 8, Unit Cost. The sum of unit costs shown in columns 4 and 6 for each item.

(b) Column 9, Cost. The sum of costs shown in columns 5 and 7 for each item.

d. Total Engineering Estimate (Subtotals, Funded Cost). Sum of columns 5, 7, and 9.

e. Adjustment of Engineering Estimates

(1) To the engineering estimates subtotal of funded costs, apply an appropriate percentage factor for commercial expenses (normally 25) percent for contractor's profit, overhead, insurance, taxes, social security, and the like and add to the subtotal.

(2) To the subtotal entry described in paragraph 2e(1), preceding, apply a factor (normally 10 percent) for contingencies (on construction projects only)--possible escalation of costs for labor, material, and other variable elements.

(3) For minor construction projects add \$11,000 for SIOH.

f. Total Funded Costs. Enter the sum of the subtotal entry described in paragraphs 2e(1) and (2), preceding.

REAL PROPERTY FACILITIES MANUAL

g. Unfunded Costs. Enter in column 9 the fees for A&E services. A&E costs generally should not exceed 10 percent of the engineering estimate as shown in paragraph 2d, preceding.

h. Total Project Cost. Enter the sum of items described in paragraphs 2f and g, preceding.

REAL PROPERTY FACILITIES MANUAL

APPENDIX D

LISTING OF ACTIVITY ALPHA CODES

<u>Alpha Code</u>	<u>Activity</u>
AL	MCLB Albany
BA	MCLB Barstow
BE	MCAS Beaufort
CP	MCAS Cherry Point
EI	MB Eighth & I
EL	Camp Elmore
ET	MCAS El Toro
FD	1st Marine Corps District
FU	MCAS Futenma
HH	HqBn HQMC Henderson Hall
IW	MCAS Iwakuni
KB	MCAS Kaneohe Bay
LE	MCB Camp Lejeune
NR	MCAS New River
OK	MCB Camp Butler
PA	MCAS Camp Pendleton
PE	MCB Camp Pendleton
PI	MCRD/ERR Parris Island
QU	MCDEC Quantico
SD	MCRD/WRR San Diego
SM	Camp Smith

REAL PROPERTY FACILITIES MANUAL

Alpha Code

Activity

TP

MCAGCC Twentynine Palms

TU

MCAS Tustin

YU

MCAS Yuma

REAL PROPERTY FACILITIES MANUAL

APPENDIX E

VALIDATION FORMS

1. Regular Program Forms. The Regular Program Forms are "Minor Construction," pages E-3 and E-4, and "Major Repair," pages E-5 and E-6.
2. Special Program Forms. The Special Program Forms are as follows:
 - a. Fire Protection. See pages E-7 through E-9.
 - b. Environmental, Minor Construction and Major Repair. See pages E-10 through E-12. For assistance contact the CMC (LFL).
 - c. Natural Resources. See pages E-13 through E-15. For assistance contact the CMC (LFL).
 - d. OSHA. See pages E-16 and E-17.
 - e. Energy and Utilities. See pages E-18 and E-19.
 - f. Safety (Nonworkplace). See page E-20.
 - g. Physical Security. See pages E-21 and E-22.

Questions concerning Special Program Forms may be addressed to the CMC (LFF), except as noted above.

3. Preparation of Validation Forms. The Headquarters Marine Corps validation representative is responsible for completing all except the top three lines of the validation forms. Activities will prepare the first three lines of the validation form per the following (one sheet for each project):

- a. Activity Name. Proper name of the activity (e.g., El Toro, Parris Island, etc.), as appropriate.
- b. Year, Month, Day. The date of the onsite validation.
- c. Command Priority Number. The priority assigned by the activity to the project by program.
- d. Project Number. The alpha numeric code number of the project as developed per guidance contained in chapter 2 of this Manual.
- e. Title. A description of the work to be done in as much detail as possible within the space provided. Use this title verbatim in all future correspondence.

REAL PROPERTY FACILITIES MANUAL

- f. Cost. List the estimated cost in thousands of dollars.
- g. Facility No./Use/Current Plant Value. List the existing facility or building number as carried on the real property inventory, the use of the facility, and its current plant value.
- h. Category Code. List the applicable predominant three-digit basic facility category code as contained in NAVFAC P-72.
- i. Cost Benefit Rating. When applicable, state the cost benefit rating of the project.

REAL PROPERTY FACILITIES MANUAL
 HQMC O&MMC PROJECT SURVEY DATA SHEET

MINOR CONSTRUCTION

ACTIVITY NAME	YR/MO/DY	of COMMAND PRI (incl supplementals)
---------------	----------	---

PROJECT NO.	TITLE	COST
-------------	-------	------

FACILITY NO./USE/RPV	CAT CODE	COST BENEFIT RATING
----------------------	----------	---------------------

- | | |
|--|--|
| A. Associated repair project number (if any): | |
| B. Has site approval been obtained (per pare 3003 of MCO P11000.12): | |
| C. Is NEPA documentation included? | |

COMMAND PRIORITY
 Upper 1/3, Mid 1/3, Lower 1/3
 15 13 10 6 2 0

OPERATIONAL INFLUENCE (What is the project's impact on the organization's operational capability?)

Direct Indirect None
 10 7 5 2 0

FACILITY USE (What is facility's primary function; based on cat code?)	LOW	MED	HIGH
--	-----	-----	------

OPERATIONS	17	18	19	20
TRAINING	14	15	16	17
MAINTENANCE	12	13	14	15
UTILITIES	11	12	13	14
ADMINISTRATIVE	10	11	12	13
HABITABILITY/MESSHALLS	10	11	12	13
STORAGE	5	6	7	8
MWR	4	5	6	7
OTHER	1	5	10	15

REAL PROPERTY FACILITIES MANUAL

REQUIREMENT IS:

A CMC directed program: 10
Concurrent with an M2 proj 15
Req'd to comply w/a MCOder 10
Change in Mission 5
Self Amortizing (w/i 5 yrs) 5

HQMC REP: _____ ACTIVITY REP: _____ TOTAL: _____

REMARKS: _____

REAL PROPERTY FACILITIES MANUAL

HQMC O&MMC PROJECT SURVEY DATA SHEET

MAJOR CONSTRUCTION

ACTIVITY NAME	_____/_____/_____ YR/MO/DY	_____ of COMMAND PRI (incl supplementals)
---------------	-------------------------------	--

PROJECT NO.	TITLE	COST
-------------	-------	------

FACILITY NO./USE/RPV	CAT CODE	COST BENEFIT RATING
----------------------	----------	---------------------

A. Associated construction project number (if any): _____

B. Is NEPA documentation included: _____

COMMAND PRIORITY

Upper 1/3, Mid 1/3, Lower 1/3
15 13 10 6 2 0

OPERATIONAL INFLUENCE (What is the project;s impact on the
organization's operational capability?)

FACILITY USE (What is facility's primary function; based on cat code?)	LOW	MED	HIGH
---	-----	-----	------

OPERATIONS	17	18	19	20
TRAINING	14	15	16	17
MAINTENANCE	12	13	14	15
UTILITIES	11	12	13	14
ADMINISTRATIVE	10	11	12	13
HABITABILITY/MESSHALLS	10	11	12	13
STORAGE	5	6	7	8
MWR	4	5	6	7
OTHER	1	5	10	15

SAVINGS OR COST INCREASE FACTOR (Economic analysis required to award points)	NO	YES
---	----	-----

A. Cost will escalate considerable
if delayed one year.

REAL PROPERTY FACILITIES MANUAL

SAVINGS OR COST INCREASE FACTOR (Economic analysis required to award point)	NO		YES	
B. Is project amortizing?	0	5	8	10
C. Will delaying project cause deterioration of other assests?	0	5	8	10
IMPACT ON MISSION IF DELAYED ONE YEAR (Economic analysis required to award points)	0	5	10	15
PROJECT GENERATED TO SUPPORT CMC DIRECTED PROGRAM, ELIMINATE LIFE THREATENING SITUATION, EXTERNALLY DIRECTED WORK, ECT.	NO		YES	
	0	2	7	10
PROJECT REQUIRED TO COMPLY WITH CURRENT LIFE SAFETY STANDARDS (Provide copy of standard cited)	0	2	7	10

HQMC REP: _____ ACTIVITY REP: _____ TOTAL: _____

REMARKS: _____

REAL PROPERTY FACILITIES MANUAL
 HQMC O&MMC PROJECT SURVEY DATA SHEET

MINOR CONSTRUCTION
 FIRE PROTECTION PROJECT

ACTIVITY NAME	/ / YR/MO/DY	of COMMAND PRI
---------------	-----------------	-------------------

PROJECT NO.	TITLE	COST
-------------	-------	------

FACILITY NO./USE/RPV	CAT CODE	COST BENEFIT RATING
----------------------	----------	---------------------

SECTION I: PROBABILITY OF FIRE LOSS

A. IGNITION PROBABILITY: What is the chance of a fire starting?
 (Consider: hazardous operations, combustible processes and
 content; target of arson; etc.)

Before Project	After Project
High 10	High 10
Moderate 5	Moderate 5
Low 0	Low 0

B. SPREAD PROBABILITY: What is the chance of a fire spreading?
 (Consider: combustible contents and structure; internal detection
 and suppression systems; exposure to/from adjoining bldgs, etc.)

Before Project	After Project
High 10	High 10
Moderate 5	Moderate 5
Low 0	Low 0

C. CONTROL PROBABILITY: What is the probability that a well
 advanced fire can not be confined and extinguished? (Consider:
 contents, structure combustibility, fire dept response distance
 and time for full fire flow response, water flow available, etc.),

Before Project	After Project
High 10	High 10
Moderate 5	Moderate 5
Low 0	Low 0

REAL PROPERTY FACILITIES MANUAL

SECTION II: IMPACT OF FIRE LOSS

A. PROBABILITY OF LOSS OF LIFE OR SERIOUS INJURY. What are the chances of death or serious injury?

1. Probability of loss of life or serious injury.

Before Project		After Project	
High	20	High	20
Moderate	15	Moderate	15
Low	5	Low	5

2. Number of Occupants (same "before" and "after")

High	10
Moderate	5
Low	0

3. Density of Occupants (same "before" and "after")

High	10
Moderate	5
Low	0

4. Percent of Nonambulatory Occupants (same "before" and "after")

Substantial/Predominant	10
Negligible	5
None	0

B. IMPAIRMENT TO SPECIFIC ORGANIZATION'S MISSION

1. Overall Impairment (same "before" and "after")

Serious	20
Considerable	15
Negligible	5

2. Are contents "critical" to the function of the mission or are "long lead" items (also consider adjacent spaces) involved? (same "before" and "after")

Yes	10
No	0

REAL PROPERTY FACILITIES MANUAL

C. REPLACEMENT COST (BUILDING AND CONTENTS) (same "before" and "after")

Critical Loss (over \$50 million)	20
Major Loss (\$10 - \$50 million)	15
Substantial Loss (\$2 - \$10 million)	10
Large Loss (\$50,000 - \$2 million)	5

SECTION III: FIRE PROTECTION ENGINEERING CONSIDERATIONS

A. Is the project required to comply with MCO P11000.11, NAVFAC DM-8, NFPA Code, or Fire Marshal/Fire Protection Engineering Survey? (same "before" and "after")

Yes	5
No	0

B. Will the project reduce activity maximum "fire flow" by 100 GPM or more? (same "before" and "after")

Yes	5
No	0

Final Validation Score Computation

	Before Project	After Project
Section I Score	_____	_____
Section II Score (if over 65, enter 65)	_____	_____
Section III Score (if over 5, enter 5)	_____	_____

Total

EQMC REP: _____ ACTIVITY REP: _____ DELTA: _____

REMARKS: _____

REAL PROPERTY FACILITIES MANUAL
 HQMC O&MMC PROJECT SURVEY DATA SHEET

MINOR CONSTRUCTION
 MAJOR REPAIR
 ENVIRONMENTAL PROJECT

ACTIVITY NAME	/ / YR/MO/DY	of COMMAND PRI (incl supplementals)
---------------	-----------------	---

PROJECT NO.	TITLE	COST
-------------	-------	------

FACILITY NO. /USE/RPV	CAT CODE	COST BENEFIT RATING
-----------------------	----------	---------------------

A. Is copy of Pollution Control Report included: _____
 (If not, a PCR must be provided prior to
 validator's departure)

B. COMPTRAK Identification Number: _____

COMMAND ENVIRONMENTAL PRIORITY

No 1: 10 pts	No 2: 9 pts	No 3: 8 pts	No 4: 7 pts
No 5: 6 pts	No 6: 5 pts	No 7: 4 pts	No 8: 3 pts
No 9: 2 pts	No 10: 1 pt		

EPA CATEGORY FOR ENVIRONMENTAL DEFICIENCIES

Class I - Currently in noncompliance; requires a copy of the enforcement action letter from the Federal, State, or local regulatory agency and/or the specific citation of environmental regulation(s).	YES	NO	
	15	0	
Class II - Not yet out of compliance, but will be if the project is not executed to meet a future regulatory deadline; requires a copy of the regulation citation specifying the deadline.	YES	NO	
	10	0	
Class III - Other than compliance; needed to improve current environmental practices.	YES	NO	
	5	0	

REAL PROPERTY FACILITIES MANUAL

1. If deficiency is Class I, then answer the following questions:

A. Is legal action (lawsuit) associated with the noncompliance?	YES 10	NO 0
B. Is the project required in response to a compliance agreement or consent order entered into with a Federal or state regulator?	YES 10	NO 0
C. Is the project required to correct a deficiency cited on an inspection or written Notice of Violation/Notice of Noncompliance by regulatory authorities?	YES 10	NO 0
D. Is the project required immediately because a regulatory deadline has passed?	YES 10	NO 0

2. If deficiency is Class II, then answer the following questions:

A. Is the project required to meet established standards and has a future compliance deadline?	YES 10	NO 0
B. Is the project required to meet a pending standard with a future compliance deadline?	YES 10	NO 0
3. Will the project eliminate the pollution source?	YES 5	NO 0
4. Will the project minimize the pollution source?	YES 5	NO 0
5. Does the project incorporate the best management practices?	YES 5	NO 0
6. Is the project listed under the Plan of Action and Milestones (POAM) to correct an environmental deficiency discovered during an Environmental Compliance Evaluation (provide a copy of the POAM)?	YES 5	NO 0
7. Have probable adverse environmental, social, and natural resource impacts been considered and documented (EIS/EA/Categorical Exclusion) under the National Environmental Policy Act (NEPA)? NEPA documentation is not considered valid unless it is coordinated with the Installation Environmental Impact Review Board.	YES 5	NO 0

REAL PROPERTY FACILITIES MANUAL

OPERATIONAL INFLUENCE: (Will failure to comply result in a shutdown of the operation by enforcement authorities?)

Direct	10 pts
Indirect	6 pts
Little	2 pts
None	0 pts

FACILITY UTILIZATION:

Primary Mission	5 pts
Security	4 pts
Habitability	4 pts
Safety	4 pts
Morale/Welfare	3 pts
Training	3 pts
Maintenance	3 pts
Admin/Storage	2 pts

HQMC REP: _____ ACTIVITY REP: _____ TOTAL: _____

REMARKS: _____

REAL PROPERTY FACILITIES MANUAL
 HQMC O&MMC PROJECT SURVEY DATA SHEET

MINOR CONSTRUCTION
 NATURAL RESOURCES PROJECT

ACTIVITY NAME	/ / YR/MO/DY	of COMMAND PRI
---------------	-----------------	-------------------

PROJECT NO.	TITLE	COST
-------------	-------	------

FACILITY NO./USE/RPV	CAT CODE	COST BENEFIT RATING
----------------------	----------	---------------------

Is the project's prime purpose one or more of the following categories?

- | | |
|--|-------|
| A. Endangered Species Protection | YES__ |
| B. Game Management | YES__ |
| C. Fisheries Management | YES__ |
| D. Soil and Water Conservation | YES__ |
| E. Wildlife Habitat Improvement | YES__ |
| F. Outdoor Recreation | YES__ |
| G. Archeology or Historic Preservation | YES__ |

Catacorization of Deficiencies

Class I: Currently in noncompliance. (Provide a copy of the enforcement action letter from the Federal, state, or local regulatory agency and/or the specific citation of the environmental regulation(s).)	YES 15	NO 0
Class II: Not yet out of compliance but will be if the project is not executed to meet a future regula- tory deadline. t provide a copy of the regulation citation(s) specifying the deadline.)	YES 10	NO 0
Class III: Other than compliance; project needed to improve current environmental practices.	YES 5	NO 0

REAL PROPERTY FACILITIES MANUAL

1.	Will the project support activity compliance with statutory/executive provisions to protect wetlands, coastal zones, protected species, migrating birds, or historical resources?	YES 30	NO 0
2.	Will the project increase Federal revenues from hunting or fishing permits, timber sales or from grazing or agricultural leases?	YES 20	NO 0
3.	Will the project protect nonconsumptive recreational use of natural resources including public use of trails, water resources, or recreational facilities?	YES 20	NO 0
4.	Will the project provide vegetative or structural protection of exposed soils, or rehabilitate disturbed areas?	YES 15	NO 0
5.	Has the project been coordinated and concurred in by applicable Federal, State, and local agencies?	YES 10	NO 0
6.	Is the project identified in the activity's long-range natural resources management plan and is it consistent with the master plan requirements?	YES 10	NO 0
7.	What is the likely outcome should this project be deferred?		

- NOTES: 1. If a letter of enforcement, or noncompliance, has been received, include this in the project documentation.
2. If certain work must be completed by a specific deadline to comply with current laws or regulations, include the deadline and a copy of the law or regulation cited in the project documentation.

REAL PROPERTY FACILITIES MANUAL

HQMC REP: _____ ACTIVITY REP: _____ TOTAL: _____

REMARKS: _____

REAL PROPERTY FACILITIES MANUAL
 HQMC O&MMC PROJECT SURVEY DATA SHEET

MINOR CONSTRUCTION
 OSHA PROJECT

ACTIVITY NAME	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">/</div> <div style="text-align: center;">/</div> </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">YR</div> <div style="text-align: center;">MO</div> <div style="text-align: center;">DY</div> </div>	<div style="display: flex; justify-content: space-between; align-items: center;"> <div></div> <div style="text-align: center;">of</div> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> <div></div> <div style="text-align: center;">COMMAND PRI</div> </div>
---------------	---	--

PROJECT NO.	TITLE	COST
-------------	-------	------

FACILITY NO./USE/RPV	CAT CODE	COST BENEFIT RATING
----------------------	----------	---------------------

Reference: MCO 5100.8

1. Does the project involve occupational (workplace with full-time military/civilian employee) safety?

YES: 20 NO: 5

HAZARD CATEGORIES: RISK ASSESSMENT CODE (RAC) (provide documentation for your determination)

Imminent Danger (RAC 1)	20
Serious or Critical (RAC 2)	15
Marginal (RAC 3)	10
Negligible (RAC 4)	5

NUMBER OF PERSONNEL AFFECTED

50 or more	25
20 - 49	15
1 - 19	10

OPERATIONAL INFLUENCE (What is the project's impact on the organization's operational capability?)

Direct	10
Indirect	8
Little	5
None	0

REAL PROPERTY FACILITIES MANUAL

REQUIREMENT TO CORRECT GENERATED BY:

Safety Inspection	10
Facility/Public Works Office	8
CMC Direct program	6
Other (specify) _____	4

FACILITY UTILIZATION

Primary Mission (activity)	15
Maintenance	12
Other (specify) _____	5 - 10

HQMC REP: _____ ACTIVITY REP: _____ TOTAL: _____

REMARKS: _____

REAL PROPERTY FACILITIES MANUAL
HQMC O&MMC PROJECT SURVEY DATA SHEET
MINOR CONSTRUCTION
ENERGY AND UTILITIES PROJECT

ACTIVITY NAME	YR/MO/DY	COMMAND PRI
---------------	----------	-------------

PROJECT NO.	TITLE	COST
-------------	-------	------

FACILITY NO./USE/RPV	CAT CODE	COST BENEFIT RATING
----------------------	----------	---------------------

REQUIREMENTS

1. Must reduce energy use in the existing facility by 20 percent per square foot of building floor area below 1985 levels no later than 2000.

OR

2. Must reduce vehicle gasoline and diesel consumption 10 percent 1995 in comparison to 1991 - increase use of alternate fuels.

OR

3. Substitute a more abundant or renewable energy foam (solar, wind, and hydro) for petroleum/natural gas.

OR

4. Provide energy/utility services at the lowest possible life cycle cost (provide life cycle cost analysis). Life cycle cost must use "NIST" Building Life Cycle Cost Computer Program and LCCID Program.

Criteria:

1. The project directly relates to the above requirements?	YES 20	INDIRECT 5	NO 0
2. The project results in quantifiable or nonquantifiable energy savings. (see note 1)	Quanti- fiable 30	Non- quant 20	No Savings 0
3. Projects with quantifiable energy savings			
a. E/C (energy saved in MBtu divided by project cost in \$1, 000s) is:	E/C >= 25 30	E/C=10 to 25 25	E/C < 10 10

REAL PROPERTY FACILITIES MANUAL

b. E/C is based on engineering analysis? (See note 2.)	YES 10	NO 5
--	-----------	---------

OR

4. For Projects without energy savings but with cost savings (See note 3.):

a. Simple payback (project cost divided by annual savings) is:	< 3 30	3-5 25	5-10 15	10 0
b. Payback based on engineering analysis? (See note 2.)	YES 10	NO 0		

COMMAND PRIORITY

No 1: 10	No 2: 9	No 3:	No 4: 7	No 5: 6
No 6: 5	No 7: 4	No 8: 3	No 9: 2	

NOTES:

1. An example of a project resulting in nonquantifiable energy savings is a project to install metering.
2. The analysis should be reviewed by the validator and provided as part of the project documentation. It should contain backup calculations which support the project's energy savings.
3. Use Criteria 3 or 4, as applicable; not both.

HQMC REP: _____ ACTIVITY REP: _____ TOTAL: _____

REMARKS: _____

REAL PROPERTY FACILITIES MANUAL
 HQMC O&MMC PROJECT SURVEY DATA SHEET

MINOR CONSTRUCTION
 SAFETY PROJECT (Nonworkplace)

ACTIVITY NAME	/ / YR/MO/DY	of COMMAND PRI
---------------	-----------------	-------------------

PROJECT NO.	TITLE	COST
-------------	-------	------

FACILITY NO./USE/RPV	CAT CODE	COST BENEFIT RATING
----------------------	----------	---------------------

COMMAND PRIORITY

No 1 - 10	No 2 - 8	No 3 - 6	No 4 - 4	No 5 - 2	No 6 - 0
-----------	----------	----------	----------	----------	----------

HAZARD CATEGORIES: RISK ASSESSMENT CODE (RAC) (provide documentation for your determination)

Imminent Danger (RAC 1)	40
Serious or Critical (RAC 2)	30
Marginal (RAC 3)	20
Negligible (RAC 4)	10

NUMBER OF PERSONNEL AFFECTED

10 or more	15
2 - 9	10
0 - 1	5

REQUIREMENT TO CORRECT GENERATED BY:

Safety Inspection	15
CMC Direct program	12
Facility/Public Works Office	10
Other (specify)	5

HQMC REP: _____ ACTIVITY REP: _____ TOTAL: _____

REMARKS: _____

REAL PROPERTY FACILITIES MANUAL
 HQMC O&MMC PROJECT SORELY DATA SHEET

MINOR CONSTRUCTION
 PHYSICAL SECURITY PROJECT

ACTIVITY NAME	/ / YR/MO/DY	of COMMAND PRI
---------------	-----------------	-------------------

PROJECT NO.	TITLE	COST
-------------	-------	------

FACILITY NO./USE/RPV	CAT CODE	COST BENEFIT RATING
----------------------	----------	---------------------

- A. Has site approval been obtained (per paragraph 3003 of MCO P11000.12C): _____
- B. Associated repair project number (if any): _____

COMMAND PRIORITY

Upper 1/3, Mid 1/3, Lower 1/3
 15 13 10 6 2 0

- | | | |
|---|-----------|---------|
| 1. Has the activity received inspections or verbal notification of noncompliance? | YES
20 | NO
0 |
| a. OPNAVINST 5530.13_ | _____ | |
| b. OPNAVINST 5530.14_ | _____ | |
| c. MCO 5500.14_ | _____ | |
| d. OTHER (specify) _____ | _____ | |
| 2. Is there legal action (lawsuit) associated with the noncompliance? | YES
20 | NO
0 |
| 3. Is the noncompliance under a compliance schedule? | YES
10 | NO
0 |
| 4. Is the project identified in the activity's master plan requirements? | YES | NO |
| 5. What is the impact if project is not funded in proposed FY? | | |

REAL PROPERTY FACILITIES MANUAL

PAYBACK PERIOD (if project will redistribute or save manpower costs; include computations in documentation)

- | | |
|-------------------|--------|
| a. Under 6 months | 20 pts |
| b. 6 - 12 months | 15 pts |
| c. 12 - 18 months | 10 pts |
| d. 18 - 24 months | 5 pts |
| e. No payback | 0 pts |

Explain how and where manpower savings will be realized _____

HQMC REP: _____ ACTIVITY REP: _____ TOTAL: _____

REMARKS: _____

REAL PROPERTY FACILITIES MANUAL

APPENDIX F

INTERNATIONAL BALANCE OF PAYMENTS PROCEDURES

1. General. All construction outside the United States, Puerto Rico, and U.S. possessions is subject to DoD policies and procedures intended to minimize expenditures affecting the IBOP. Such procedures, include the use of U.S. contractors, U.S. procured materials and end products (sand, gravel, and the like excepted), U.S. surface and air carriers, prefabricated installations and structures manufactured in the United States, and competent troop labor. These procedures can be modified, however, per various country-to-country agreements.

2. Procedures

a. To maintain Foreign Exchange Costs (FECs) at a minimum, cost estimates for projects in foreign countries will be prepared to show the effect of construction under both "Normal" and "Planned" procedures. This will permit analysis and response to NAVFAC inquiries regarding the items contributing to EFC.

b. The definitions of "Normal" and "Planned" procedures are as follows:

(1) Normal Procedures. Those construction procedures which would normally be used at a particular location if no effort were made to suppress FEC (local labor or materials).

(2) Planned Procedures. Those procedures used at a particular location to minimize FEC (U.S. labor or material or a combination of both).

c. Project cost estimates are to be made under each procedure and a summary provided on the DD 1391 in the following manner:

IBOP Data:

Normal Procedure*		Planned Procedures	
Total Project		Total Project	
Cost	FEC	Cost	FEC
\$100,000*	\$80,000	\$130,000	\$40,000

REAL PROPERTY FACILITIES MANUAL

d. The EFD will recommend the procedure to be followed by applying asterisks as shown above. Generally, the recommended procedure will be based on the following criteria:

(1) Planned procedures will be recommended where for every dollar increase in cost from NORMAL to PLANNED there is a resulting two dollar or greater decrease in FEC, except where country-to-country agreements specifically establish construction procedures. When this requirement cannot be met, construction usually will be recommended using NORMAL procedures.

e. Any recommendation contrary to the above criteria must be fully explained. In any case, the total cost estimate shown on the DD Form 1391 must reflect the cost under the recommended procedure.

REAL PROPERTY FACILITIES MANUAL

APPENDIX G

GUIDE FOR PAYMENT OF ADMINISTRATION COST TO ENGINEERING FIELD DIVISIONS OF THE NAVAL FACILITIES ENGINEERING COMMAND

1. SIOH. Includes those administrative costs associated with contract award, inspection, material testing, and other supervisory actions taken during the contract accomplishment. These services will normally be provided by the EFDs without charge. In the event a charge is anticipated to pay for temporary additional duty and per diem, for inspections, consideration should be given to accomplishing this proposed action with activity personnel.

2. PP&S. Includes the development of contractual documents, such as invitation for bids, and formal contract documents complete with necessary drawings to show the nature and scope of work to be accomplished. For O&MMC projects, this work is expected to be accomplished in-house by activity personnel. Exceptions shall be limited to those projects that are extremely complex or when engineering disciplines at the activity are extremely limited. In exceptional instances, the service will be requested from the EFD or contracted for with a commercial architect and engineering firm. In either case, when work is not accomplished in-house, reimbursement can be expected. Justification for outside assistance will be required by Headquarters Marine Corps. Shortage of personnel will not normally suffice if a full staff of engineer disciplines is shown on the activity's table of organization.

3. Postcontract Award Expense

a. There should be no expense for postcontract award services. Tasks bearing this title should be financed by the EFD or on occasion could be undertaken by activity personnel.

b. In the event charges are requested for postcontract award services, such as contractor surveillance, as-build drawings, or material testing, the request should be forwarded to Headquarters Marine Corps via intermediate commands. This request must contain full explanation of the service received so that a resolution of the proper funding source may be made by Headquarters Marine Corps, NAVFACENGCOM, and the Navy Comptroller.

4. Concurrence. The NAVFACENGCOM has reviewed and concurs with the policies of the preceding that impact on the EFDs and the NAVFACENGCOM .

REAL PROPERTY FACILITIES MANUAL

APPENDIX H

ABBREVIATIONS/ACRONYMS

A&E	Architectural and Engineering
ADP	Automated Data Processing
ASD (A&L)	Assistant Secretary of Defense (Acquisition and Logistics)
ASN (S&L)	Assistant Secretary of the Navy (Shipbuilding and Logistics)
BEQ	Bachelor Enlisted Quarter
BFR	Basic Facilities Requirement
BFRL	Basic Facilities Requirements List
BMAR	Backlog of Maintenance and Repair
BOD	Bid Opening Date/Beneficial Occupancy Date
BOQ	Bachelor Officers Quarter
Btu	British Thermal Unit
CLEP	Chapel Life Extension Program
CMC	Commandant of the Marine Corps
CWE	Current Working Estimate
CQC	Contractor Quality Control
DM	Design Manual
DOD	Department of Defense
EFD	Engineering Field Division
EIP	Energy Improvement Program
ENV	Environmental Program
EPSU	Engineered Performance Standards Utilization
ERR	Eastern Recruiting Region

REAL PROPERTY FACILITIES MANUAL

ESR	Engineering Service Request
FEC	Foreign Exchange Cost
FIRE	Fire Protection Program
FMF	Fleet Marine Force
FPD	Facilities Planning Document
FSR	Facilities Support Requirement
FWA	Fraud, Waste, and Abuse
HQMC	Headquarters U.S. Marine Corps
HVAC	Heating Ventilation Air-Conditioning
IBOP	International Balance of Payments
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
MCLB	Marine Corps Logistics Base
MCON	Military Construction
MCRD	Marine Corps Recruiting Depot
MRP	Maintenance of Real Property
MWR	Morale, Welfare, and Recreation
NAF	Nonappropriate Fund
NAVFAC	Naval Facilities
NAVFACENGCOM	Naval Facilities Engineering Command
NCF	Naval Construction Force
NOTAL	Not To All
O&M	Operation and Maintenance
O&MMC	Operation and Maintenance, Marine Corps
OICC	Officer in Charge of Construction

REAL PROPERTY FACILITIES MANUAL

OSHA	Occupational Safety and Health Act
PCAC	Post Contract Award Cost
PED	Project Engineering Documentation
PMC	Procurement, Marine Corps
POL	Petroleum, Oil, and Lubricants
PP&S	Project Plans and Specifications
RAC	Risk Assessment Code
RDT&E	Research, Development, Test, and Evaluation
ROICC	Resident Officer in Charge of Construction
RPMA	Real Property Maintenance Activities
SAFE	Safety
SHPO	State Historic Preservation Officer
SIOH	Supervision, Inspection, and Overhead
WRR	Western Recruiting Region